# ENIGMA 2000 NEWSLETTER



http://www.enigma2000.org





[Thanks KW]

# UK Embassy Kabul, Afghanistan

Note the now redundant communications equipment. What of the antennas atop the peak, whose are they and what for?



## ISSUE 127 November 2021

http://www.enigma2000.org



# **Editorial**

### **New Domain Name for ENIGMA 2000**

Due to problems with our old domain, ENIGMA 2000 now has a new address;

#### www.enigma2000.org

This replaces our old domain name of enigma2000.org.uk which is now inactive. Apologies to anyone affected by this during the change-over. Our hosting domain of www.signalshed.com remains unchanged and active [Many thanks to Brian for his help with this small problem]

### New Signals? Ideas please

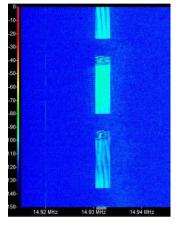


Fig01

#### Unknown Transmission

The waterfall shown in Fig01 is a digital transmission intercepted on 14930kHz 1020z 01/11/2021. There are a series of transmissions.

Prior to the 1020z intercept a previous series were found at 1010z 13965kHz again on 01/11/2021.

These put me in mind of the hybrids we had been seeing from Cuba but I don't think this is from there.

Fig02 illustrates each 'packet' anf the contents, Fig03 the 'FSK component' if that is what it is.

So, any ideas are welcome

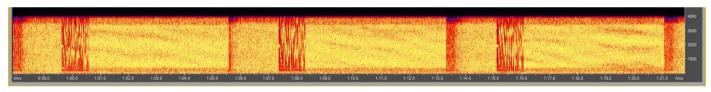


Fig02

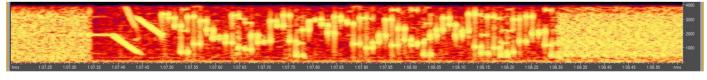


Fig03

A SAMPLE OF THE TRANSMISSION CAN BE FOUND IN GROUP FILES AS: unknown tx.wav

#### **Propagation**

As we approach the clock change the propagation for September has been variable once again. Some frequencies chosen obviously will not offer much chance of the target station being heard unless an online SDR unit it used; however, some lifts have occurred with surprising results throughout the September month. October saw a CME affecting propagation around 13th and 14th. On the morning of 14th I noted that most activity to be noted was between 80 to 30m with little to be seen above 11MHz. On the morning of 18/10 PLdn found XPA2 p as NRH and poor condx; more disturbances. The day before a contact with MRE20 was had during Exercise BlueHam, a fair stretch from PLdn's QTC with Weak and Fair Readable exchanged over a noisy 60m frequency. That said there were other stations working satisfactorily upto 18MHz but this morning [18th] there were few around and mostly 80m. Not helpful propagation by far  $\otimes$ 

Peter, PoSW notes: Propagation remains variable as always, the variation in signal strengths of some of the regular number station schedules from week to week, S06s for example, quite noticeable.

Moving towards winter in the northern hemisphere with increasing hours of darkness the lower short-wave frequencies are perking up somewhat; the Canadian time signal station on 3330 kHz has been strong enough to over-ride local interference at around 0600 UTC on several occasions in October and amateur stations from the United States in QSO with stations in Europe have been heard at the top end of the 80 metre band at around the same time.

In the last days of October the higher frequencies have come alive; on Saturday 30-October a tune around the 10 metre band showed a great deal of activity, no doubt greatly assisted by the fact that a contest was in progress, with many SSB stations mostly from parts of the former Soviet Union, UA4, UT3, RK4, and RL4 during a quick tune around just after 0915 UTC and later on 4X1, Israel and OD5, Lebanon? There had been a great deal of activity on ten in the late spring and early summer when most activity was from southern Europe.

Peter also noted additional transmissions which in his logs sent to ENIGMA2000 headed as "Something Completely Different" he noted Well, I don't recall having heard this one before; a female voice version of the E07 station:-

2-Oct-21, Saturday:-1501 UTC, 8157 kHz, YL voice calling "504 504 504 1", unlike the E07 OM voice this was in AM with LSB suppressed, or USB with carrier. Weak signal, somewhat muffled audio, difficult copy. DK/GC "7159 2" x 2, short message, "313?6 36653" (?) x 2 followed by the usual "000 000" finish, cut carrier approx 1503z.

A repeat found at twenty minutes past the hour:-

1520 UTC, 7649 kHz, as heard earlier, even weaker signal and more difficult to hear.

Searched lower down at 1540z for a possible third sending but nothing found.

Nothing more heard on the following days but on the Friday there was activity on 8157, not the gender-reassigned E07 but the related M12 Morse station:-

8-Oct-21, Friday:- 1500 UTC, 8157 kHz, M12 with, "068 068 068 1", DK/GC "4397 1" x 2, so another short message – in fact messages don't come much shorter, just one 5F group,

"03400". Followed, after a short pause, by the usual, "000 000".

Listened for a repeat at 1520z on 7649 but nothing heard.

Nothing heard on Saturday 9-Oct.

Nothing heard on most of the following days on these frequencies but something heard on the 14<sup>th</sup> which may have been from the same source: 14-Oct-21, Thursday:- 1500 UTC, 8157 kHz, tuned in a bit after the hour in time to hear some kind of digital-data type signal, ended a few seconds afterwards.

1520 UTC, 7649 kHz, similar data signal as heard earlier, lasted approx 50 seconds...

Listened on most days at 1500z, 4 PM UK time but nothing further heard – although on Friday 29-October there was a strong "XJT" churning away on 8157, or very close to it, not noticed before.

Which leads us nicely into the following information sent to us by 'E' who heard another style of transmission also:

#### **ZAPAD-21** [WEST -21] [Noting 'E' heard Russian numbers 11360kHz 1306z 12/09]

#### Russia's Zapad-21: Lessons Learned

September 20, 2021

https://cepa.org/russias-zapad-21-lessons-learned/

The glimmer of hope is that Russia might be more willing to avoid miscalculation and tactical errors with NATO and its allies.

The live-fire elements of the Zapad-21 military exercises took place between 10-16 September across 14 training ranges in Belarus and Russia.

Western countries were not invited to observe the drills but it featured hundreds of troops from "friendly" states like India and Kazakhstan, among others.

The Zapad drills have always been about rehearsing operational-strategic warfighting at the regional level against NATO, with a particular focus on force mobility, joint operations across army branches, and high-level Command and Control (C2).

With the active phase of the Zapad-21 Russian strategic exercise now over, and Western attention subsiding, it is time to assess what U.S. and NATO policymakers should remember from this year's drills.

1) Sealing the military deal with Belarus

While Belarus president Aliaksandr Lukashenka walked unwillingly into Zapad-17, this year he plunged head first into the drills. Not least because the geopolitical context has changed tremendously for him since the August 2020 presidential election and subsequent public upheaval.

With Belarus' foreign policy options severely constrained with the West, Zapad-21 re-enshrined the military importance of the Union State and the increased military integration — if not the "merger" — between Russia and Belarus.

In September, both countries signed yet another strategic partnership that opens the way to greater military-technical cooperation and arms sales. Russia will not have a permanent base in Belarus after all, but the debate has now shifted. In March, Russia announced the creation of three joint training centers — one of which will open in Grodno in Belarus.

Meanwhile, the Baranovitchi airbase will reportedly host Russian Su-30 fighter aircraft for training and border patrol purposes, as well as air defense systems. This marks the continued integration of Belarus within Russia's joint regional air defense network, further deepening military interoperability between both countries.

Russia could potentially use Belarusian territory for military operations towards Kaliningrad and other "Suwalki gap" scenarios still get plenty of policy attention in Western capitals. In the aftermath of Zapad-21, it will be interesting to look at what stays behind, namely whether Russian troops or hardware present in Belarus during the drills completely relocate to Russia or not.

It is one thing to leave troops behind, but it is another to pre-position fuel dumps or ammunition. This might be a telling sign of future Russian intentions with Belarus

2) A defensive exercise (really) aimed at countering NATO

Every Zapad is the same: the official rhetoric sold by the Russian Ministry of Defense presents the exercise as "purely defensive in nature." The drills might be, but the intentions behind them are not.

Again, Zapad is about fighting a technologically advanced peer or near-peer competitor (read, NATO and its allies) at the regional level — with the possibility of moving to strategic conflict and the use of nuclear weaponry.

The drills clearly send a message about the Kremlin's willingness to defend Russian territory in case of aggression. This further needs to be contrasted with the recent comment by Deputy Foreign Minister Ryabkov that the United States is an "adversary."

This is particularly relevant as the proposed scenario of this year's exercises was an initial act of aggression from a coalition of states vaguely resembling NATO territory, against which the Union State of Russia and Belarus had to defend. And ultimately repel by organizing a counter-offensive through a regional combat grouping of forces.

The goal of the exercise is to show the ability of the Russian armed forces to move fast and well in a Western strategic direction. And while the Western Military District is the main actor in Zapad, it was also supported by troops from the Central Military District, reservists, and security forces such as Rosgvardia and the FSB.

Ultimately, Zapad signals to NATO and its allies that pre-emptive "enemy" operations will be met with decisive Russian force, which therefore raises the cost of deterrence.

Correction: A previous version of this article stated that the Grodno base would host Russian Su-30s rather than Baranovitchi base.

3) Zapad-21 will inform Russia's upcoming military doctrine

Zapad-21 tested the features of how Russia strategizes regional warfare against a technologically advanced competitor, honed by recent evolutions in military strategy and military thinking. This notably encompasses "active defense," a theory officially introduced in 2019 by Chief of the General Staff of the armed forces Valery Gerasimov. His legacy (but not his doctrine) will undoubtedly be inscribed in the upcoming, updated Russian military doctrine.

Active defense is linked primarily to the pre-emptive neutralization of threats through limited action in order to counter perceived Trojan horses and other fifth-column color revolutions. According to this view, Western powers are seeking to undermine Russia's political stability by instrumentalizing potential internal protest.

Such encroachments must be countered with pre-emptive force through a strategy of limited action, and notably by using asymmetric warfare capabilities, covert operations, and other non-conventional measures.

Both these features were rehearsed during Zapad-21, and lead to two observations. First, Russian military planners are increasingly thinking in terms of an initial period of war (IPW), a Soviet-inherited concept aimed at achieving operational surprise at the onset of a conflict.

Second, there is a renewed emphasis on peacetime pre-positioning of force and equipment, and combat readiness. Accordingly, past Zapad drills have always been linked to stress-testing strategic mobility and military logistics (especially railway and vertical mobility) with an onus on speed.

After the reduction of military support systems in the 2010s, the Russian armed forces are focusing again on peacetime organization and the pre-positioning of forces and equipment in key nodes in order to increase combat readiness and general preparedness. The latest example took place in Voronezh and Crimea earlier this year.

4) The drills showcased Russia's modern warfare capabilities

Zapad-21 offered a snapshot of how Russia operates at the operational-strategic level. Much has already been written about what happened on training ranges during the "hot" phase of the drills.

Beyond rapid deployment and combat readiness, the centerpiece of Zapad-21 related to testing the integration of Russia's Command and Control (C2) systems, further to lessons learned on the battlefield in Syria and (less officially) in Ukraine.

This year, the drills prominently featured ground-air combined operations, air superiority, and air support missions, as well as the testing of multi-layered air defense capabilities and precision-guided munitions. These were strengthened with electronic warfare counter-measures as well as the integration of aerial drones and counter-drone capabilities.

Another focus was force mobility, with combined ground operations employing airborne assault units (VDV), vertical mobility and airlifts, and assault landings. With the logic of moving fast and well, military sapper units and engineer assault battalions rehearsed the usual mix of engineering support (pontoons, river crossings, etc.), demining, minesweeping, and chemical, biological, radiological, and nuclear (CBRN) solutions. Furthermore, combat service support units practiced direct repair and maintenance of critical pieces of hardware.

Finally, Zapad-21 tested "new generation warfare" through the use of modern military technology and advanced systems — of notable interest, electronic warfare, cyber warfare, and military robotics. These systems are force-multiplier technologies offering the Russian armed forces asymmetric advantages against the perceived military superiority of peer or near-peer competitors.

5) The Arctic featured noticeably during Zapad-21

The naval component is always an integral part of Zapad and it did not disappoint this year. In particular, the Northern Fleet played an important role in and around Zapad-21. This falls within the context of the creation of OSK Sever (Northern Fleet Joint Strategic Command) in January 2021, which now operates as a new fully-fledged military district.

One of the notional enemies fighting the Union State of Russia and Belarus was dubbed the Polar Republic and (un)intended to loosely represent Nordic countries — notably Norway - and attacking Russia from the Barents Sea.

The Northern Fleet responded by carrying out its own Freedom of Navigation Operation (FONOP) in the European High North, with the clearly-established aim to defend sea approaches on the Kola Peninsula and ensure unhampered access to the Northern Sea Route (NSR), Russia's main sea line of communication in the Arctic.

This is particularly important since military tension in the High North seems to be crystallizing around successive FONOPs and other demonstrations of uncontested regional access. After the US-UK joint operations in the Barents Sea in May 2020, the Kremlin is now expecting NATO to contest Russian claims over the NSR.

Beyond the FONOP, Northern Fleet troops practiced amphibious assault landings in order to retake captured seaports from enemy forces - notably in Dudinka. Other drills included anti-ship and air defense, anti-submarine warfare, or counter-mine operations.

Zapad-21 has tremendous internal military value for the Russian armed forces, and notably incorporates lessons learned in the military and logistical sustainability of regional warfighting against a peer competitor.

Geopolitical propaganda aside, the Kremlin reportedly behaved this time and avoided the global positioning system (GPS) jamming and other provocative behavior from four years ago. The glimmer of hope is that Russia might be more willing to avoid miscalculation and tactical errors with NATO and its allies.

https://cepa.org/russias-zapad-21-lessons-learned/

### The following stations/frequencies have also been noted [thanks to all those involved here]

Last year, and around the same time Daniel and Ary were aware of an exercise involving E17z as well as polytones and F06.

For E07 [and using the same voice as the also new V07] both posted by Ary we have:

E07 with the same voice as the new V07

7649kHz1520z 02/10 504 504 504 1 7159 2 71519 2 31336 36653 000 000 Ary SAT

Also E17z

Courtesy of Edd [note date here]

10240kHz 1200z 14/09 strong

274 509 16 51809 31808 71909 83981 24035 48115 14151 51809 23807 15521 96111 10544 98003 68909 45279 43828 509 16 00000

Courtesy Edd Smith via. SDR Enschede.

then intercepted fm Ary:

 10240kHz1250z
 02/10
 Msg below
 Ary
 SAT

 8080kHz1205z
 02/10
 Msg below
 Ary
 SAT

274 963 15

88620 58069 61732 74537 57440 10597 23521 47660 92883 69901

39534 11160 43494 37638 16070

96 15 00000

 10240
 24-10-2021 1515 E17z
 USB
 Ary
 SUN

 8080
 24-10-2021 1528 E17z
 USB
 Ary
 SUN

274 903 18

 $33796\ 13577\ 74526\ 45547\ 79302\ 53516\ 25616\ 56069\ 96812\ 14199$ 

65906 66610 20336 17301 88554 82045 42994 84116

903 18 00000

10240 31-10-2021 1440 E17z USB Ary SUN

8080 31-10-2021 1507 E17z USB

247 518 30

 $39534\ 17228\ 15636\ 47891\ 23247\ 17099\ 94961\ 35826\ 65906\ 77288\\ 88146\ 57856\ 98835\ 46186\ 16945\ 80744\ 86200\ 84706\ 42227\ 61736$ 

 $09394\ 76911\ 75155\ 92918\ 97067\ 58604\ 41438\ 03092\ 68362\ 01653$ 

518 30 00000

10240 had many problems. It took them 22 mins to deliver the message

8080 khz is still going on/off/restarts at 1536z

Followed by tests after.

V07

| 7649kHz0605z | 02/10 | 367 367 367 1 4103 1 4103 1 25199 000 000       | Ary | SAT |
|--------------|-------|---|-----|-----|
| 7649kHz1435z | 02/10 | 367 367 367 1 5352 1 5352 1 31552 000 000       | Ary | SAT |
| 7649kHz0605z | 03/10 | 367 367 367 1 3611 2 3611 2 83543 43218 000 000 | Ary | SUN |
| 7649kHz0735z | 03/10 | 367 367 367 1 6262 1 6262 1 02652 000 000       | Ary | SUN |

It didn't stop there!

Previously on Tuesday 14/09 Edd contacted us to say that he had intercepted an E17z transmission suggesting it mght be a training message:

10240kHz 1200z 14/09 strong Edd TUE

274 509 16 51809 31808 71909 83981 24035 48115 14151 51809 23807 15521 96111 10544 98003 68909 45279 43828 Courtesy Edd Smith via. SDR Enschede.

On Saturday 02/10 Ary heard two transmissions from E17z, one at 1250z on 10240kHz, with the repeat 15m later at 1305z on 10240kHz

| 10240kHz1250z<br>8080kHz1305z<br>274 963 15<br>88620 58069 61732<br>39534 11160 43494<br>96 15 00000                             |   | Msg below<br>Msg below<br>40 10597 23521 47660 92883 69901<br>70 | Ary<br>Ary | SAT<br>SAT |
|--|---|--|------------|------------|
| 274 861 23   |   | USB Synthesized lady<br>89 84672 27426 02027 28156 49834         | Ary        | WED        |
| 10240 27-10-2021<br>8080 27-10-2021<br>274 861 23<br>96419 81652 91791<br>33684 93413 13805<br>17201 32388 20981<br>861 23 00000 | 1405 E17z<br>11309 8738<br>5 93922 0619 | Ary<br>Ary   | WED<br>WED |            |
| 8080 27-10-2021<br>Synthesized lady. 1   |   | USB nitter test. On/off voice: 274                               | Ary        | WED        |

But it is not only voice transmissions where this has been occurring; Brian wrote in to offer:

'There were also several unscheduled M12 transmissions reported by Edd Smith, Andre & Ary.

12158kHz 0850z 21 Sep Tue

8157kHz 0810z 22 Sep Wed 8148kHz 0850z 22 Sep Wed

All using an '068' ID.

Brian suggested these may not be related – but in all earnest, who knows?

Returning to the V07 transmissions Ary reported a French Language V07 transmisson [designated V07F] kindly made known from Priyom [Thanks indeed]:

#### **V07F**

 12158
 02-10-2021 1600

 12153
 02-10-2021 1605

 11588
 02-10-2021 1610

 11434
 02-10-2021 1615

 10643
 02-10-2021 1620

 10427
 02-10-2021 1625

367 367 367 1 7711 2 7711 2

56429 34444 000 000

Returning to the Spanish Language version transmissions were found to be occurring every five minutes as shown; again thanks Ary:

#### V07

7534kHz0600z 02/10 7649kHz0600z 02/10 8157kHz0600z 02/10 9283kHz0600z 02/10 8148kHz0600z 02/10 8094kHz0600z 02/10 367 367 367 1 4103 1 4103 1 25199 000 000 7534kHz0600z 03/10 7649kHz0605z 03/10 8157kHz0610z 03/10 03/10 9283kHz0615z 03/10 8148kHz0620z 8094kHz0625z 03/10 367 367 367 1 3611 2 3611 2 83543 43218 000 000 7534kHz0730z 7649kHz0735z 03/10 8157kHz0740z 03/10 9283kHz0745z 03/10 8148kHz0750z 03/10

03/10

8094kHz0755z

367 367 367 1 6262 1 6262 1 02652 000 000

V07

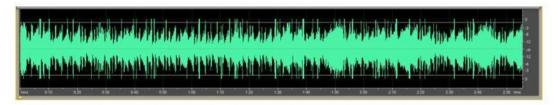
1600z 7534kHz 1605z 7649kHz 1610z 8157kHz 1615z 9283kHz 1620z 8148kHz 1625z 8094kHz

16/12 367 1 5936 1 5936 1 48244 000 000 Ary SAT

17/10 367 1 5928 1 99932 000 000 Ary SUN



E07 Spectral Image 7649kHz



V07 Spectral Image 7649kHz

Not much to be seen here to suggest the transmissions are anything but correct; the reasons for the new transmissions may well be other than sending actual messages and more along the lines of a need to over burden those who professionally monitor this stuff and those who apply signals analysis.



[Sent in by E]

It is well known that Russia is taking a lot of diplomatic and other flak from a variety of governments. This happened before with Ukraine and the Crimea matter [2014?]; on this occasion frequencies around 10240kHz were utilised and rebroadcasts of past E07 and M12 stations were heard as well as polytones.

On 7<sup>th</sup> October RNGB posted: S06s found using a new male synthesised voice. Weak tx on 12415kHz Nothing heard at 1210z on 14212kHz

175 492 5 22272 64385 82606 05234 33526 492 5 00000

This was followed up by Jochen who said "This was live-traffic, not synthesised. You can note this, when you compare the 5 0s at the end, because they are different articulated."

With additional stations and modes as seen? Note use of 8157kHz [With thanks to Ary] Also E06 with slow delivery, passed to Ary by friend, thanks:

11123 16-10-2021 0900 E06 13532 16-10-2021 0930 E06 980 764 31 32911 85927 51038 48901 85738 62349 06571 53751 46224 47416 52428 22271 68090 68608 95318 09560 09620 06274 56687 96348 17020 79220 44411 66238 04375 13213 39051 55700 97361 28322 74335 764 31 00000

#### XPA1

8157 16-10-2021 1000 XPA1 MFSK-20/10Bd 8157 16-10-2021 1010 XPA1 MFSK-20/10Bd 8157 16-10-2021 1020 XPA1 MFSK-20/10Bd

 $77838\ 30630\ 68940\ 85424\ 26524\ 42567\ 94773\ 34152\ 14001\ 67872\\ 10369\ 11594\ 04961\ 20106\ 33902\ 76517\ 64846\ 90182\ 18201\ 74398$ 

66708 71231 46417 34023

8157 17-10-2021 1000 XPA1 MFSK-20/10Bd 8157 17-10-2021 1010 XPA1 MFSK-20/10Bd 8157 17-10-2021 1020 XPA1 MFSK-20/10Bd 471 471 471 1 471 471 1 471 471 471 1 08442 00067 66219 90831 02312 32472 26494 04819 79604 61887 27916 99468 69715 91378 42633 05275 13500 46234 09133 81544 58192 90685 37716 23700 29927 51305 80820 22571 30470 31061 44432 68917 77526 38504 07996 14114 31791 46404 33403 64217 46921 64460 16774 50611 74550 63960 62049 62574 01792 65667 68190 01314 34863 96387 35861 56534 17383 81038 48331 53153 02783 19485 36073 51925 85093 51555 15094 99452 96285 24613

Courtesy Ary

#### XPA2 others

8157 17-10-2021 1210 XPA2 MFSK-16/20Bd (AB) 09663 00086 21656 14302 45258 47023 81753 18042 73088 02921 91250 82076 78017 03014 23975 05378 17713 69155 98384 93817 61779 52509 38394 90970 12565 30025 76191 90918 43161 05434 84005 46125 51242 66385 91796 81944 86776 25136 29762 31634 31585 76147 37676 93489 05912 03163 64591 60929 54663 52993 96844 82364 45410 82660 94183 68386 73234 96053 46285 00554 36384 45917 98596 03071 11035 22232 62843 10399 47973 61324 79842 15031 22581 60154 09176 42299 18085 63412 59987 21166 50774 77178 93149 31625 26939 09393 20623 10347 10507 Courtesy Ary

#### XPB1 [fm Ary]

8148 16-10-2021 0620 XPB1 MKSK-16 8084 16-10-2021 0625 XPB1 MKSK-16 7534 17-10-2021 1430 XPB1 MFSK-16 7649 17-10-2021 1435 XPB1 MFSK-16 8157 17-10-2021 1440 XPB1 MFSK-16 9238 17-10-2021 1445 XPB1 MFSK-16

8148 17-10-2021 1450 XPB1 MFSK-16 8094 17-10-2021 1455 XPB1 MFSK-16

8157 16-10-2021 0610 XPB1 MKSK-16

| 16306 22-10-2021 0715 XPB1 MFSK-16<br>15856 22-10-2021 0720 XPB1 MFSK-16 | Ary<br>Ary | FRI<br>FRI |
|--|------------|------------|
| 8145 22-10-2021 1300 XPB1 MFSK-16  | Ary        | FRI        |
| 7751 22-10-2021 1315 XPB1 MFSK-16  | Ary        | FRI        |
| 6954 22-10-2021 1320 XPB1 MFSK-16  | Ary        | FRI        |
| Ary noted, "I was unable to find the other frequencies."                 |            |            |

| 7534 22-10-2021 1705 XPB1 MFSK-16<br>6843 22-10-2021 1710 XPB1 MFSK-16<br>5875 22-10-2021 1720 XPB1 MFSK-16   | Ary<br>Ary<br>Ary | FRI<br>FRI<br>FRI |
|---|-------------------|-------------------|
| XPB1 - MFSK-16, both 16bd and 32bd was used   |                   |                   |
| 17462 23-10-2021 0700<br>16306 23-10-2021 0710<br>15856 23-10-2021 0720<br>20083 23-10-2021 0700<br>19309 23-10-2021 0710<br>18238 23-10-2021 0720<br>17442 23-10-2021 0800<br>15825 23-10-2021 1110<br>9387 23-10-2021 1410<br>9057 23-10-2021 1420                        | Ary               | SAT               |
| 17462 24-10-2021 0700<br>16306 24-10-2021 0710<br>15856 24-10-2021 0720<br>20083 24-10-2021 0700<br>18238 24-10-2021 0720<br>17442 24-10-2021 0800<br>20658 24-10-2021 1300<br>7751 24-10-2021 1310<br>6954 24-10-2021 1312<br>9387 24-10-2021 1410<br>9057 24-10-2021 1420 |                   |                   |
| 8136 24-10-2021 1430z   | Ary               | SUN               |
| 11123 26-10-2021 1220 XPB1 MFSK-16<br>13545 26-10-2021 1230 XPB1 MFSK-16  | Ary<br>Ary        | MON<br>MON        |

A short occurrence list can be found on our website on the issue of the temporary 'n90n' series. It is thought this latest event with V07 and E07 [reported once] is similar.

Obviously if the matter changes then this latest analysis will be disproved; one must remember the thoughts of Daniel and Ary last year concerning an 'Exercise.'

#### Remember the Lincolnshire Poacher [E03]?

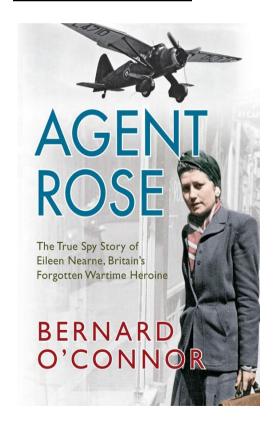
A recent event involving the clandestine activities of an ENIGMA2000 officer at a certain Public House/B&B in Lincolnshire [to later scope out a particular fighter bomber] and determine a certain frequency of 190Mc/s resulted in these two images, you'll get the idea.





Thanks DGW05

# **Book Review**



#### Agent Rose by Bernard O'Connor

Review by BR

On 02 September 2010, the body of an 89 year old woman was discovered in a rented flat in Torquay, Devon. Neighbours knew very little about her. She had been a fairly reclusive person in life. Council officials searching the flat for details of relatives discovered that the woman was Eileen Nearne & that during WWII she had worked as a radio operator in occupied France. Following a local newspaper article on her death about this forgotten hero the story spread, first nationally then worldwide.

The book by its very title claims to tell the story of Eileen, (Didi), Nearne, but very early on in the narrative the author's admission that his publisher was looking for 60,000 words & that he had less than 4,000 words sets the style for this book. Despite much research there is still very little known about Didi's life & activities so much of the book consists of general details of training & operation that was given to all agents at the time Didi was active

Had this book been written as a general work on how SOE agents were trained & operated, it would have been a more honest & enjoyable read. However, the continual use of 'maybe', 'perhaps', 'possibly' to try to make the narrative fit into the largely unknown activities of Didi made the reading of this book somewhat strained & frustrating at times.

I'm left feeling uncomfortable that this brave woman's name has seemingly been used to market a book to fulfil a demand following the huge media interest that followed her death. Didi was a deeply private person & had no wish to make her story public in life. It may have been better if that wish had been respected following her death.

This will be the last newsletter of 2021; the list owner and moderators particularly wish all those who have contributed throughout 2021, our members, those of N&O and Priyom and all other readers Compliments of the Season.

#### We start our newsround with something a little different sent in by our NI Asset:

#### Motorola facing competition inquiry over emergency services radio network

The CMA has launched an investigation amid concerns that the telecoms company could be 'cashing in' on its position.

Motorola is being investigated by the competition watchdog over its Airwave emergency services radio network (Nick Ansell/PA)

By Henry Saker-Clark, PA City Reporter

October 25 2021 11:37 AM

https://www.belfasttelegraph.co.uk/news/uk/motorola-facing-competition-inquiry-over-emergency-services-radio-network-40982235.html

The UK competition watchdog is investigating Motorola's UK emergency services network Airwave.

Bosses at the Competition and Markets Authority (CMA) have launched the probe amid concerns that the telecoms company could be "cashing in" on its position, costing both customers and the taxpayer more than necessary.

Motorola bought Airwave – a mobile radio network used by all UK emergency services to communicate with one another – in February 2016.

The acquisition was cleared by the CMA, with the understanding that the Government would shut down the Airwave network by 2019, but this has now been delayed until the end of 2026.

In July, the regulator said it was consulting over whether to investigate the tech firm over worries about its dual role as both owner of Airwave and as a key supplier for its planned replacement.

On Monday, the CMA said that, after gathering initial evidence, it is concerned that "the market for the supply of the mobile radio network used by all emergency services in Great Britain might not be working well".

It added that this may therefore be "resulting in a more expensive service for customers and, ultimately, the taxpayer".

The watchdog highlighted worries that the Home Office has insufficient information for pricing negotiations, potentially placing it in a weak bargaining position.

The CMA also flagged concerns that Motorola's dual role means it has an incentive to delay or shape the rollout of the new Energy Network Service (ESN) to its advantage.

CMA chief executive Andrea Coscelli said: "As the sole provider of critical mobile radio network services used by our emergency services, we're concerned that Motorola could be cashing in on its position, leaving taxpayers to cover the cost.

"We're now referring this market for a full investigation so that we can thoroughly examine these concerns and, if necessary, take action to address any problems."

We strongly believe that a market investigation is not warranted.

A Motorola Solutions spokeswoman said: "We strongly believe that a market investigation is not warranted.

"The Airwave service delivers exceptional value for money for the UK taxpayer.

"Motorola Solutions has provided price reductions even while making significant investments to maintain the network, which is relied upon by the UK emergency services every day and continues to function at the highest levels.

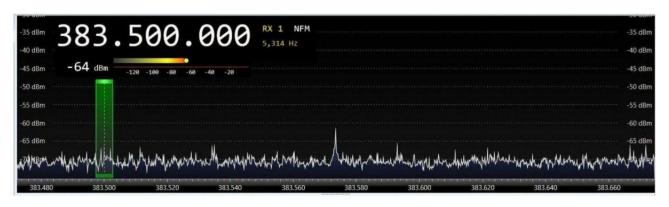
"We reject the assertion that we have an incentive to delay the implementation of the ESN.

"In fact, we continue to deliver on our commitments and invest heavily in the ESN programme and its launch remains our key priority for the benefit of public safety professionals and citizens across the country.

"We look forward to working with the CMA independent group to demonstrate that Motorola Solutions continues to provide exceptional value for the UK emergency services."

https://www.belfasttelegraph.co.uk/news/uk/motorola-facing-competition-inquiry-over-emergency-services-radio-network-40982235.html

NI Asset: Many thanks for info about something when being installed cost very much more than its estimate; its operation likewise to the point officers in some areas/forces were asked to limit its use due to costing. Then, there's the national failure when users had to resort to using mobile phones whilst the system failed December 2020 as illustrated in this first image:



Not a lot of activity to be seen



With Airwave functioning again one can see the variation of signal strength depending on transmitting unit location.

This failure was confirmed in conversation with an officer who was returning SD cards with evidential CCTV of a local crime back to me.

Under investigation? Cash cow? It's an interesting system at least and took away much interest from 'scannerists' who plotted whole analogue systems by frequency and CTCSS use to the point of official interest and that from the tabloids too.

The old Storno VHF system in the METPOL was replaced by a Motorola; at its introduction a Motorola rep was asked [and how did this bloke get into the forum] 'Can it be heard with a scanner?' The reply was 'For each talkgroup you'll need at least eleven scanners.' What a load of piffle because it was soon found the channels could be identified and with judicial use of the scanner squelch and possibly inserting the odd attenuator it was almost business as normal.

Obviously there was need for secrecy and that has been achieved. There's certainly no offence watching the spectrum but for most the technicalities are of no interest and would never replace *exciting* spoken messages and following foot or vehicle chases. A sad but necessary loss to the radio scene.

#### Police given 'bazookas' to shoot down rogue drones

Constance Kampfner Wednesday October 27 2021, 12.01am, The Times

https://www.thetimes.co.uk/article/police-given-bazookas-to-shoot-down-rogue-drones-lwh0wqf8q

Police officers in Scotland will be equipped with bazooka-like devices that can fire electromagnetic pulses to down rogue drones during Cop26.

The weapons work by blocking signals from the devices' controllers, and are capable of taking down planes. "There will be Police Scotland officers with EMPs [electromagnetic pulses] stationed around airports including Glasgow and Prestwick," a source told the Scottish Sun.

"They have had extensive training on how to use them safely and effectively. If an unauthorised drone is spotted or picked up by the radar these guys will take them out. The EMPs shoot a ray which then makes the drone think it's been disconnected from its user."

Drones which have been disabled by EMPs will usually have been programmed to land safely or return to their starting points, however some may simply fall out of the sky.

Temporary airspace restrictions, banning the use of drones and hot air balloons, will come into force across large swathes of Scotland at midnight on October 31 and will come to an end late on November 13.

The Civil Aviation Authority and police said the rules would cover Glasgow and the west, parts of Dumfries and Galloway, Argyll and Bute, Stirling and Edinburgh and the Lothians.

A Police Scotland spokeswoman said: "Drones are able to fly in certain areas but it is the pilot's responsibility to fly safely and legally — we would ask all aviators to check the NATS website or Drone Assist app prior to any flight to check the restrictions in their area."

More than 100 world leaders will be attending the climate change conference. Defences are being ramped up across the city.

https://www.thetimes.co.uk/article/police-given-bazookas-to-shoot-down-rogue-drones-lwh0wqf8q

### Submarine pact with Australia against China

Larisa Brown

Wednesday September 15 2021, 10.00pm, The Times

 $\underline{https://www.thetimes.co.uk/article/submarine-pact-with-australia-against-china-qnjv9rskn}$ 

Britain and the US will help Australia to build nuclear-powered submarines as part of a strategic alliance created in the face of an increasingly provocative China.

In a joint statement, Boris Johnson, President Biden and Scott Morrison, the Australian prime minister, said last night: "We will leverage expertise from the United States and the United Kingdom, building on the two countries' submarine programmes to bring an Australian capability into service at the earliest achievable date."

The pact comes as antagonism between the US and China deepens, with Biden dragooning allies into a more robust posture at a Nato meeting in June. It is likely to cause further friction between China and the West.

The UK considers it to be the most significant capability collaboration signed globally in the last few decades.

Biden heralded Britain's involvement as part of a broader trend of European nations playing a greater role in the Indo-Pacific.

A senior US official said: "Great Britain is very focused on the concept of 'global Britain' and their tilt is about engaging much more deeply with the Indo-Pacific, and this is a down payment on that effort. This alignment is about . . . a new architecture of meetings and engagements among our senior defence and foreign policy officials to share perspectives, to align views.

"But we will also announce efforts to spur co-operation across many new and emerging arenas: cyber, AI — particularly applied AI; quantum technologies; and some undersea capabilities as well . . . You're going to see a much more dedicated effort to pursue integration of security and defence-related science, technology, and industrial bases, and supply chains."

China has been investing billions in its navy and is becoming more aggressive in the region.

Australia is expected to tear up a \$90 billion deal with France to receive new diesel-electric submarines in favour of nuclear-driven ones which stay underwater for longer, move faster and are considered to be almost "undiscoverable" by navy experts.

Johnson said that while the three nations were separated geographically, "our interests and values are shared", adding that they were "natural allies".

The prime minister added: "The AUKUS alliance will bring us closer than ever, creating a new defence partnership and driving jobs and prosperity.

He said that it would be "one of the most complex and technically demanding projects in the world" that would last for decades and require the most advanced technology. He said that it would draw on the expertise that the UK had acquired over generations.

Biden said that the nations recognised the "imperative of ensuring peace and stability in the Indo-Pacific over the long term".

It is still unclear which component parts Britain will provide for the submarines, although businesses are expected to win sizeable defence contracts as a result, creating hundreds of highly skilled scientific and engineering jobs. The submarines would typically go about 8 knots faster than diesel-electric vessels. They can sustain that speed indefinitely, whereas a diesel-electric has to recharge its batteries regularly. A diesel-electric submarine also emits exhaust gases which makes it detectable, while a nuclear-powered one is much harder to locate.

Britain has built nuclear-powered submarines for 60 years, with work carried out by Rolls-Royce near Derby and BAE Systems in Barrow-in-Furness, Cumbria. The Royal Australian Navy is already procuring as many as nine of Britain's Type 26 frigates.

Biden was forced to deny reports yesterday that President Xi turned down his invitation to meet after a 90-minute phone call between the leaders last week. The official Xinhua News Agency said that Xi expressed concerns in the call that US policy towards China caused "serious difficulties" in relations.

The Chinese embassy in Washington responded to news of the pact by saying that "countries should shake off their Cold War mentality and ideological prejudice".

On a single day in April, China added three vessels to its navy: a destroyer, an amphibious assault ship and a Jin-class Type 094A ballistic-missile submarine.

Its naval battle force has more than trebled in two decades. The formidable force is conducting operations in more distant waters.

Meanwhile, its relations with Australia — a crucial US ally — are in a downward spiral, with a freeze on high-level diplomatic talks.

It is against this backdrop that Australia turned to the US and the UK to ask for help in building a new fleet of nuclear-powered submarines. The three nations are already part of the Five Eyes intelligence sharing partnership. The new defence and security partnership reflects concern over China's strength and the US's desire to beef up the capabilities of its neighbours.

The pact, to be signed formally in Washington next week, reflects the growing concern over China's military strength and a US desire to beef up the capabilities of its neighbours.

The project will make Australia only the seventh country in the world to have nuclear-powered submarines. Britain has been operating nuclear-powered submarines since the 1960s.

According to Royal Navy sources, they will be a step change in capability compared with the diesel electric submarines that Australia had previously agreed to buy off France. Rolls-Royce, in Derby, could supply the reactors.

The submarines will likely take years to develop but once at sea, they will be able to remain there for long periods of time and travel without detection.

To compare a future Australian navy with China's would be absurd. However, no future conflict would occur without the backing of its allies.

https://www.thetimes.co.uk/article/submarine-pact-with-australia-against-china-qnjv9rskn

### Inside abandoned secret torpedo testing station in Cornwall

The doors have been unlocked for an exclusive look inside before it is demolished ByGreg MartinPhotojournalist 17:23, 25 SEP 2021
NEWS

https://www.cornwalllive.com/news/cornwall-news/gallery/inside-abandoned-secret-torpedo-testing-5966290?utm\_source=sharebar&utm\_medium=email&utm\_campaign=sharebar

Abandoned MOD torpedo testing station at Porthkerris Point in Cornwall (Image: Greg Martin)

In August 2019, CornwallLive were given exclusive access to an abandoned MOD observation post in Cornwall, which, for decades, was used as a secret torpedo testing station.

With new plans for the site, the doors were opened for one last look inside, ahead of its imminent demolition. But now, more than two years later, the mysterious building still stands - its past locked inside.

Behind a high barbed wire fence, the imposing Cold War era building perched on the rocks at a remote cove on the Lizard Peninsula was built by the Ministry of Defence after the Second World War.

Between 1952 and 1993, run by the RAF, the Aircraft Torpedo Development Unit (ATDU) and eventually the Royal Navy, the station at Porthkerris Point functioned as the main control centre for an airborne torpedo testing range off the Cornish coast.

Triangulating with a secondary observation post at Nare Point, both stations recorded the precise trajectories and entry angles of dummy torpedoes as they were dropped into the sea, in the early years from planes, and then from Wessex and Sea King helicopters.

Nevertheless, at the time, the data gathered and the means of recording it were so secret that some rooms were out of bounds even to those who were stationed at the post.

Inside the 18th century bathroom hidden in a Cornish cliff

In more recent years, the three-storey building was used as accommodation for military personnel taking part in diving training exercises and other outward bound activities, but has since been described as "in a significant state of disrepair and is not safe for occupation."

Once inside - after the pages of protocol to unlock the gates and access the building have been strictly followed - the basic kitchen, training rooms, and sleeping quarters which have been used in recent years do not allude to the station's clandestine past.

However, the cylindrical tower sticking out from the south-eastern corner of the building and sealed off with huge, rusting shutters, indicates that not all of the rooms in this station were quite so benign.

Taped onto the door that is the entrance to the round room behind the metal shutters, is a sign that reads 'Out of Bounds'. Its recent addition will have been for health and safety, to keep people staying on the site away from the many hazards inside. But in the years when the room was operational, it was still out of bounds even to some of the personnel working at the station.

One such serviceman who was stationed at Porthkerris, and never saw behind this closed door, is Dave Goodrum, who served in the Navy for 37 years, and is now retired and living nearby in Falmouth.

In 1967, as part of his five year apprenticeship as an artificer in the Navy (artificer is the title used in the armed forces for a skilled engineer,) Dave Goodrum was sent to RNAS Culdrose for nine months of field training. During the summer, he spent around four weeks stationed at Porthkerris, looking after the army radar truck which was positioned on the cliff edge directly above the torpedo range building.

The purpose of the radar truck was to provide radar coverage of the torpedo testing range, an area of water below the high cliffs which, at the time, could not be covered by the existing radar at Culdrose. Radar coverage was essential, especially at night, when many of the torpedo tests were carried out.

Although he was never allowed inside the circular room at the observation post, Dave caught glimpses of it when the shutters were opened and says that this is where a powerful rangefinder camera was used during the tests, to accurately record the performance of the dummy torpedoes, with an overall aim to develop the capability of airborne launched anti-submarine torpedoes.

Underneath the discarded furniture and debris, there is a raised platform in the circular room with metal tracks in the floor and steps leading up to it. This is undoubtedly where the large camera would have been positioned, with a panoramic view of the bay when the metal shutters were opened.

A smaller, secondary observation post with similar curved shutters and the same recording technology was set up at Nare Point, so that the exact speed, direction and position of the torpedoes could be calculated using the data from both stations.

When the MOD shut down the torpedo testing facility in 1993, the range building at Nare Point lay abandoned for over a decade, until it was handed over to the National Coastwatch Institution in 2005, who still use it to keep watch over boats in the bay to this day.

Above the out of bounds circular room, on the third storey of the station, was the Ops Room.

Inside the Ops Room, which was essentially an air traffic control tower, a helicopter controller would stay in contact with the helicopters as they flew into the range with the torpedoes, and could monitor all movements in the bay on a plan position indicator (PPI) radar display (one of those round screens that bip with a flashing dot), which was fed directly from the radar truck on the cliff top.

After the dummy torpedoes were dropped and reached their intended position underwater, they would jettison lead weights from inside the torpedo heads, so that the torpedoes would then float to the surface, ready to be recovered by Navy boats.

These boats would then bring the recovered torpedoes back to the station at Porthkerris, where there are steps leading down to the sea.

Torpedo tests did not happen every day, and even in his short time at Porthkerris, Dave Goodrum admits to having plenty of free time to 'laze around on the beach and do a spot of fishing' during what he remembers to be a pretty good summer. Thinking back to those days, Dave says smiling: "It was a very good number for us!"

However, he does remember one night which was not quite so relaxing. During an operation, one of the large Wessex helicopters got a technical warning, meaning that the pilot had to put it down immediately.

Rather than ditching it in the sea, he decided to land it within the small compound of the station. At 2am, in almost complete darkness, Dave and his fellow radio man, guided the helicopter in and safely landed it next to the building. When they went out in the morning to see it, they realised they had done it with only about two foot of clearance room around it.

Eventually, the radar truck on the cliff top that Dave Goodrum had looked after during the summer of '67, was replaced by a more permanent radar building slightly further inland, which still fed directly into the station at Porthkerris Point.

After the torpedo testing operations ceased at Porthkerris in the nineties, the building continued to be used by the armed forces for diving, which the cove is now well-known for.

In 2019, pre-application advice was sought to demolish the abandoned torpedo testing station and replace it with a brand new, single story building specifically designed 'to provide improved sleeping and dining facilities capable of serving a wider range of naval personnel including younger and older family members plus those with disabilities.'

However, within the advice offered by Cornwall Council's Principle Development Officer, it was highlighted that the "Historic Environment Service has commented that the existing building is a Cold War observation post recorded in the HER (MCO43114) and would oppose its demolition in the absence of justification within a Heritage Statement assessing its significance."

The MOD observation post at Porthkerris is one of the last remaining torpedo testing stations in the country.

The pre-application form confirms that 'the building will remain an MOD asset providing facilities for military personnel.' However, if and when it is built, it is unlikely that whatever happens in the new building, will be quite so secretive.

https://www.cornwalllive.com/news/cornwall-news/gallery/inside-abandoned-secret-torpedo-testing-5966290?utm\_source=sharebar&utm\_medium=email&utm\_campaign=sharebar

Well worth looking at original article for the imagery

## **Spying Diplomats**

On 11th July 2011 the then British Foreign Secretary William Hague announced that he was calling for five Libyan Diplomats to be expelled from Britain because their presence 'posed a threat to national security.'

This action had been announced in Parliament by Hague, "To underline our grave concern at the regime's behaviour, ... we have today taken steps to expel five diplomats at the Libyan embassy in London, including the military attache," The diplomats were given seven days to leave British shores.

This action was made as Britain and other nations intervened in the governing of Libya by Muammar Gaddafi and feasibly against warnings that to remove Gaddafi may open a Pandora's Box of terror and dissent.

This act of expelling diplomats is not new. Britain expelled ninety Russian Diplomats on 25<sup>th</sup> September, 1971 after an in-depth investigation by MI5, MI6 and MI7 officers aided by the defection of a KGB officer holding the rank of Major who worked under the cover as a diplomat. What he told MI5 officers left no doubt as to the accuracy of their product from months of an intensive investigation.

The then Foreign Secretary, Sir Alec Douglas-Home had previously written two courteous and personal letters over this matter which were never answered; the lack of an answer angering the then Prime Minister Edward Heath.

In addition to the ninety diplomats, many employed within the embassy but others in the Trade Delegation, Moscow Narodny Bank, Intourist, Aeroflot and AMO Plant another 15 diplomats who were outside of the British Isles had their visas cancelled to deny their planned re-entry to Britain.

It was believed that Russian spies had been gathering information necessary to disrupt communications and transport along with destruction of power and water supplies. It was also feared that spy rings had been formed around such military sites as Adermaston [atomic weaponry], Orfordness [over the horizon radar tests] and Portland Admiralty Underwater Weapons Establishment.

Such a belief would have been fuelled by the previous arrests of the Portland Spy Ring [Peter and Helen Kroger, Gordon Lonsdale, Harry Houghton and Ethel 'Bunty' Gee] in 1961 and RAF Chief Technician Douglas Britten arrested in 1968 for passing secrets to his handler whilst working in a SIGINT Unit in Britain and whilst overseas.

The Major who defected and gave important information to Security Officers was named as Oleg Lyalin, who was aged 35 at the time and was arrested on suspicion of driving whilst under the influence of alcohol. Lyalin was having an affair with his secretary Irina Teplyakova who also defected. It was during his arrest that Major Lyalin decided to ask for help from MI5. After matters had settled the couple moved quietly to the seaside town of Bournemouth, changed identities and married. Oleg Lyalin passed away in February 1995.

These activities took place against the Cold war backdrop and the almost mythical struggle of the Free West against the evil intent of 'Iron Curtain' Russia and the countries that supported it or fell within the Union of Soviet Socialist Republic and whilst this game has been played for decades a more modern setting shows it exists on both sides of whatever divide is crossed.

In 1963 the public at large was treated to a scandal that involved a society osteopath, a Minister for War, a Viscount, two Caribbean 'musicians,' a pair of good time girls and a Russian spy. The effect of this scandal was such that it ultimately destroyed Prime Minister Harold Macmillan's government, the career of Jack Profumo – the Minister for War – and caused the defendant in a subsequent trial for 'Living on Immoral Earnings,' Stephen Ward to commit suicide.

The two girls involved in this affair were Christine Keeler and the late Mandy Rice-Davies. It was Keeler who was sleeping with Jack Profumo at the same time she was sleeping with a Russian diplomat, the now late Evegni Ivanov. Both persons were introduced to Christine Keeler by osteopath Stephen Ward and bature took its course

Unfortunately for all parties involved Evegni Ivanov was no ordinary diplomat; he was the Assistant Soviet Naval Attaché. Not only that but he lived at 16 Kensington Palace Gardens, London W8. This street, known locally as KPG is home to several billionaires and more importantly a host of Embassies, including the Russian Embassy which is number 5 KPG.

The address used by Ivanov, whilst sounding somewhat innocent, was in fact an operational installation of Soviet Russia and judging by the antennae that abounded around the building, vertical HF and VHF rods, and the VGDSh cage antenna widely used by Soviet installations and their supporters, the building was at least a communications hub for its nearby embassy, or more probably a SIGINT/ELINT, signals or electronic intelligence intercept site.



Russian Diplomatic Facility 16 Kensington Palace Gardens London W8 (circa 1997)

As seen on cover of En117 and also where PLdn was chased off from whilst photographing a satellite dish inside the grounds [when I could run]!

Indeed, Peter Wright makes mention of this building and the Embassy when employing RAFTER [utilised the product of the received frequency plus or minus the Intermediate Frequency stage of the target receiver] to listen to or determine what frequency the Embassy or 16KPG were listening. The now late Peter Wright and late Tony Sale [rebuild of Colossus Computer at Bletchley Park] some years earlier, in 1958, used a modified bakers van to make a number of passes to determine what frequencies were being used by Moscow Centre to contact Soviet Agents in London with their 'allo or Number Station message. RAFTER was also used to provide evidence in the arrest of a man named Linney who was working for the RAF on missile simulators and passing certain items of interest on to his Soviet masters.

The MI5 watchers, who at the time operated their communications in a band of frequencies termed 'P' Band that fell in the middle of the then emergent. but now common VHF FM broadcast band 88 to 108MHz, were proven to being monitored by the Russian facility by the RAFTER method. The signals then employed by both MI5 and the Metropolitan Police 'main set' transmissions used a split frequencies for transmission within 82 to 84MHz also.

At the time there was a claim and more lately strongly denied by Keeler, that she had been asked by Ivanov to ask the Minister for War certain details about Britain's nuclear deterrents.

Russia was not alone in using diplomatic cover for espionage activities; as late as May 2013 Russian authorities caught a US Diplomat allegedly spying. The diplomat in question was Ryan Christopher Fogle working as a Third Secretary at the US Embassy, Moscow. Intercepted by the FSB, allegedly on his way to meet and recruit a Russian to spy for the CIA, certain items associated with espionage were confiscated at the time of his arrest. After being detained overnight, Fogle was expelled from Russia the very next day.

For America the worst discovery of some of its diplomats activities came on two events involving forced entry to its embassies; one was in Saigon, Vietnam where CIA files, insufficiently shredded and left unsullied in burn bags were subsequently reconstructed.

These files not only showed the full extent of US espionage but gave the emergent government the name of its citizens who had not only helped the US in its actions against the Vietcong but were also left to their fate.

There was, at least, one US agent working in the Vietcong controlled north who was successfully removed to safety but also received his instruction via a US transmitted OWVC - one-way voice channel - or better known as a Number Station.

The other was the forced entry of the US Embassy in Iran by 'students' who were loyal to Ayatollah Khomeini during which most of the embassy staff were held prisoner for 444 days. During that time the embassy was searched and files, intact or shredded were analysed as was the cryptological, radio and associated equipment leading to the conclusion that the US Embassy in Tehran was a 'Nest of Spies.'

MI5 in Britain announced that the level of Russian spies in the UK was at 'Cold War levels' but equally one could also say that China too will have increased its interest in Britain. Adverts for Russian and Chinese language analysts perhaps reflect this worry. Whilst military matters will be of interest of greater interest will be financial movements and energy supplies. However, matter in the Ukraine may well have made the search for additional supplies from elsewhere to safeguard the level of supply should the 2% of natural gas supplied by Russia become threatened.

> [Only 2% - from what newspapers are saying 20/09/2021 you'd think its 100% given the predicted effects of the media from Cde Putin's geopolitical movements at the moment]!

Sweden, the home of the original 'Whiskey on the Rocks' scandal on 27th October 1981 when a Russian Whiskey Class submarine S363 ran aground some 10km away from the Swedish Naval Base at Karlskrona.

Whilst this event was merely a maritime accident the Swedish navy used advanced techniques to determine that the boat was carrying at least one nuclear warhead and a standoff developed as to the return, or not, of the stricken vessel to Russian control. The boat was eventually towed off the rocks and out to sea but not before radar emissions were operated in frequency hopping mode and radio jamming took place. The view from the Swedish government was that their coastline was being regularly penetrated.

Thirty three years later, on Sweden's Baltic coast a lone male, dressed in black and carrying a back pack was seen and disappeared out of view. This prompted a search for the elusive Russian submarine since it was thought this person was a spy being picked up by a Russian submarine. Helpfully the Russian Defence Ministry denied any Russian Naval activities in the area; whether that was just useful propaganda is not known but TASS, the official Russian News Agency made a noticeable media release.

Perhaps not wishing to be outdone the Swedish Security Service, SAPO, recently claimed that Russia is the biggest intelligence threat against Sweden. Going further they stated that one in three of accredited diplomats in Russia's consulate and embassy in Gothenburg are engaged in a variety of espionage taks against Sweden.

Like the concerns stated by MI5 China is also active in Sweden along with Iranian operatives also.

Sweden has invested in advanced technology, some of which can undoubtedly be seen in the five corvettes of the Visby class vessel, capable of stealth mode and powered by waterjets each is capable of a speed in excess of 35 knots. One of the features of the craft is its lightness being constructed using sandwiched composites.

With futuristic naval craft one can at least see why other nations would be interested is such technology; that Russia is perhaps enthusiastic is no surprise

From the files of PLdn

# CIA agent suffers 'Havana syndrome' The Times30 Sep 2021David Charter Washington

A CIA agent in Serbia is believed to have suffered a directed-energy attack after experiencing symptoms consistent with the condition known as "Havana syndrome" that has affected 200 US officials worldwide.

The removal of the agent from Serbia follows recent suspected cases in Austria, Germany, India and Vietnam that have led to growing frustration among US diplomats and spies.

As research continues into the cause of complaints such as dizziness, headaches, nausea and ringing sounds, the rise in cases is said to be sapping morale among intelligence staff and depressing interest in serving overseas.

Congress unanimously passed a bill last week to provide healthcare for officials complaining of Havana syndrome.

"In the past 60 to 90 days there have been a number of other reported cases" in the US and globally, James Giordano, a Georgetown University professor of neurology, told The Wall Street Journal.

Marc Polymeropoulos, a veteran CIA officer who retired in 2019 after persistent symptoms following a 2017 visit to Moscow, added: "The lights are blinking red now. This is a crisis for ... officers overseas."

Havana syndrome was named after two dozen US spies and diplomats became unwell in the Cuban capital in 2016. Investigators believe that there are too many cases for it to be a coincidence but some researchers maintain that they represent a kind of hysteria.

William Burns, the CIA director, has appointed a veteran of the agency's hunt for Osama bin Laden to lead a task force seeking the cause and tripled the number of staff focused on the issue.

When Burns visited India this month a member of his team reported symptoms and received medical treatment.

Kamala Harris, the vice-president, temporarily delayed her arrival in Vietnam last month after the State Department reported a "possible anomalous health incident", the US government's formal name for Havana syndrome. Suspicion has fallen on Russia's military-intelligence unit, the GRU, because of its technological capabilities and its suspected presence in countries where cases have occurred. Moscow has denied any involvement.

Giordano said that the cause could be a rapidly pulsed microwave, a form of ultrasonic or acoustic device or a laser.

In July two dozen American officials developed unexplained illnesses resembling Havana syndrome in Vienna.

In August it was reported that two officials at the US embassy in Berlin who complained of Havana syndrome were working on projects relating to Russia. One female member of staff in the team defending against Russian cyberattacks and a male staff member working on the Nord Stream 2 pipeline were sent back to the US, Bild reported.

Another patient from Europe who returned to the Walter Reed military hospital in Maryland said doctors diagnosed a brain injury similar to exposure to the shock waves from explosions.

From The Times

# Now onto the Intercepts .....

If you have not already done so, please read the Editorial/Intros

# **Morse Stations**

All frequencies listed in kHz. Freqs are generally +- 1k

This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

#### **Morse Stations**

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#### UNID CW

An Unusual Series of Continuous Cyrillic 5-Letter Groups Appear Suddenly from the Moscow Area.

#### First Report - 8230kHz:

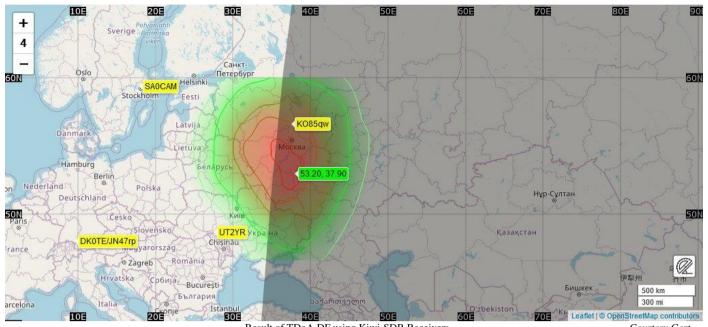
First reported at 1439z, in progress, on 14 September with a very strong signal into S.E. England, sending continuous, fast 5-letter Cyrillic groups with no pauses, headers or identification. The speed & use of continuous groups makes it sound very much like a Cyrillic version of M51.

This was picked up by a number of members & was shown to be a very strong signal in the UK, the Netherlands & Germany.

Later information provided by Ary, (AB), showed that the transmission started at 1325z on Tuesday, 14 September & ceased at 0625z on Wednesday, 15 September, but had previously been present on 8250 kHz on Monday night, 13 September before switching to 8230 kHz.

8230 1325 – 0625z 14/15 Sep 5-Ltr Cyrillic continuous groups with no pauses, headers or identification TUE

The reason for the transmission is unknown, but most likely Morse training or possibly searching or direction finding exercise. Ary, (AB), reports the origin of the signal as the Moscow area which is convincingly confirmed by this excellent DF result supplied by Gert using the online kiwi-sdr receivers TDoA function.



Result of TDoA DF using Kiwi-SDR Receivers

Courtesy Gert

#### Second Appearance - 9000/9001/9002kHz:

The transmissions reappeared on 07 October, found by Gert, in progress at 1700z, using three carriers on 9000, 9001 & 9002 kHz, with strong signals of S9+20db into the Netherlands.

9000//9001//9002

1700z (IP) - 0700z 07/08 October

5-Ltr Cyrillic continuous groups with no pauses, headers or identification

THU

Logged by BR in the UK, still going at 0127z on 08 October, but now weak on Twente, (was very strong around 1900z). Strongest frequency 9001kHz with weaker sigs on 9002 & 9003, as reported.

Andre, F5JBR, confirmed frequencies of 9001, 9002 & 9003 with a 599 + 10db in France & 599 + 30db via Finnish SDR. Despite searches between 2 – 18 MHz no simulcast transmissions were found.

Gert reports the transmission ended at 0700z on 08 October - A continuous transmission of 14 hours from first log of signal in progress.

#### Third Appearance - 12320kHz:

12320

1833z (IP)

13/14 Oct

5-Ltr Cyrillic continuous groups with no pauses, headers or identification

WED

Once again reported with a very strong signal into the UK & Europe, fading during the late hours. Confirmed still active at 0600z on 14 October.

#### PoSW also monitored this unusual M12 activity.

On several occasions in September and October some very strong CW was noted, on various frequencies, mainly 5-letter groups with occasional punctuation symbols, in fact very similar to the traffic heard from the French CW station on 6825 and 3881:-

14-Sept-21, Tuesday:- 1831 UTC, 8230 kHz, extremely strong CW, S9+ and then some, groups as described above, checked with two receivers and was not in parallel with the French CW on 3881 which was a good signal at this time. Continuous with no breaks or pauses. Checked from time to time throughout the evening and was always on, still strong at 2200 UTC.

15-Sept-21, Wednesday: 0535 UTC, early morning check, still on with a very strong signal. However, had gone when monitored at 0625z, not heard on this

01-Oct-21, Friday:- 0658 UTC, 11301 kHz, strong CW similar to the above, keyed carrier lightly modulated with an audio tone, still on at 0720z, gone when checked at 0745.

07-Oct-21, Thursday:- 1504 UTC, 9001 kHz, strong CW as above, again lightly modulated with tone. Still on throughout the rest of the day, going strong at

08-Oct-21, Friday:- Still on when checked at 0535 UTC, not quite as strong as the previous evening but was stronger at 0640z, well over S9. Had gone when checked at 0740z.

26-Oct-21, Tuesday:- 1509 UTC, 10381 kHz, strong CW with 5-letter groups, keyed carrier with low-level tone modulation, checked several times throughout the rest of the day, still on at 1920z although weaker than earlier, gone when checked at 2040z.

29-Oct-21, Friday:- 1239 UTC, 12101 kHz, very strong CW with similar format to the above, no sign of any audio tone modulation on the keyed carrier. Checked at roughly one hour intervals and was always on with a strong signal. Was still going strong at 1835 UTC but had gone when checked at 1950. This frequency is inside the 25 metre broadcast band and when checked on the following morning, Saturday 30-October just after 0800 UTC there was a strong station on 12100 kHz – The Overcomer Ministry with preacher Brother Stair in full flow, a remarkable performance considering he died earlier this year.

(Thanks for the detailed logs, as usual, Peter. Indeed, Brother Stair's demise does not seem to have prevented his ability to broadcast!)

#### Cyrillic Morse:

The majority of Cyrillic Morse letters have Latin approximations based on similar sounding letters. There are, however, four characters used that have no equivalent & the presence of these will allow the listener to identify the Morse as Cyrillic. These are;

Ш CH \_\_\_\_\_ Ю Ü \_\_\_\_ Я Ä \_\_\_\_ Ч Ö \_\_\_\_\_

Thanks to AB, BR, F5JBR, Gary, Gert, Jochen\_Kopf & PoSW for logs, info & comments.

[I might add it's been a few years since DoK/G3LKO passing. If only he had waited – a good Morse man, trained at the expense of the RAF as an intercept operator he relished the Cyrillic characters even when taking text at near 40wpm. We'll likely not seem those skills too often nowadays]

#### **Morse - Number Stations**

M01/2 XIV MCW, hand (463 sched for Sep - Oct). Will change to M01/1 sched ID 197 for Nov - Feb.

Use of the variant formats appears to have largely ceased - At least for now. Four variant formats have been identified.

| Standard Format:  | $197 (R4m) 117 117 30 30 = 93447 \dots 20478 = 117 117 30 30 000$       | (Still the most commonly used format) |
|-------------------|---|---------------------------------------|
| Variant Format 1: | 197 (R4m) 147/30 147/30 78902 86083 147/30 000                          | (Not in use)                          |
| Variant Format 2: | $197 (R4m) 521=30 = 521=30 = 46547 \dots 88305 = 521=30 = 521=30 0=0=0$ | (Not in use)                          |
| Variant Format 3: | $463 (R4m) 127 30 = = = 84820 \dots 82607 = = = = 127 127 30 30 000$    | (Last used 2019)                      |
| Variant Format 4: | $197 (R4m) 589 589 = 30 30 = 40728 \dots 58918 = 589 589 = 30 30 000$   | (Used in Jan/Feb & Sep/Oct 2021)      |

The Format 4 variant makes a reappearance & was used a number of times in the September & October period, last seen in January & February of this year.

A new development first noted in July 2021 is the occasional change to the ending where 0.0.0. is sent using periods in place of the usual 000. Also, on 11 Sep, 16 Sep & 28 Sep, 6 x 'dits' were sent instead of the period character between the ending short zeros.

In September, a number of transmissions carried the incorrect call-up, with '025' used in place of the correct '463'.

# September 2021:

| 5020    | 2000z<br>2000z<br>2000z<br>2000z<br>2000z<br>2000z<br>2000z<br>2000z<br>2000z | 02 Sep<br>07 Sep<br>09 Sep<br>14 Sep<br>16 Sep<br>21 Sep<br>23 Sep<br>28 Sep<br>30 Sep | '025'       581 30 ==        73485 == Fair. Fast. Sent incorrect call-up. Numerous errors         '025'       291 = 30 ==         9565 == Weak. Poor copy. Ended 0.0.0       Format 4         '025'       Very weak. Mostly unreadable. Ended 0.0.0.         '025' then '463' 671 30 == 84732       63382 == Fair, fast. Several errors noted.         '463' 387 30 == 46573       12386 == Weak/Fair, fast. Numerous errors. Ending 0 [six dits](x3)         '465' 619 30 == 09128       45687 == Weak/fair, fast. With errors. Call-up sent as 465 vs 463.         554 30 ==       4 . 87 == Weak, very fast. Poor copy         '463' 925 30 == 47285       71846 == Weak, very fast. With errors. Ended 0 [six dits](x3)         '463' 183 30 ==        05638 == Weak, fast. Number of grps joined with no pauses | BR BR BR/HFD BR/HFD BR/HFD BR BR BR BR        | THU TUE THU TUE THU TUE THU TUE THU TUE |
|---------|---|--|--|---|---|
| 5475    | 1800z<br>1800z<br>1800z<br>1800z<br>1800z<br>1800z<br>1800z                   | 02 Sep<br>14 Sep<br>16 Sep<br>21 Sep<br>23 Sep<br>28 Sep<br>30 Sep                     | 35789 =  Fair via Twente, fast Missed start. Ended 0.0.0.<br>'025' then '925' $653\ 30 = 64738\dots$ $94734 = $ Fair, very fast. Several errors noted.<br>'463' $543\ 30$ $13467\dots$ $90586$ Fair/Good, fast. Error grp21. = 0 omitted from ending<br>'465' $404\ 30 = $ $= 66066\dots$ $65787 = $ $= $ Fair, fast. With errors. Call-up sent as 465 vs 463.<br>'463' $973\ 30 = $ $36\dots$ $49650 = $ Fair via Twente, very fast. Ended 0.0.0.<br>'463' $351\ 30 = $ $36473\dots$ $74925 = $ Weak/Fair, med-fast. Corrected error grp11<br>'463' $620\ 30 = $ $84920\dots$ $96480 = $ Weak/Fair, fast. Nigh noise. Poor copy   | BR<br>BR<br>AB/BR/HFD<br>BR<br>BR<br>BR<br>BR | THU TUE THU TUE THU TUE THU             |
| 6260    | 1500z<br>1500z<br>1500z<br>1500z<br>1500z                                     | 04 Sep<br>11 Sep<br>18 Sep<br>25 Sep<br>30 Oct   | '463' 528 30 = 47285 67017 = Weak/fair. Heavy QSB. No errors noted (Via Twente) '463' 571 30 = 36452 64736 = Fast. With errors. Ended with 0 [six dits] (x3) '463' 911 30 = 33945 47366 = Fair, fast. Several errors noted '463' 980 30 = 89372 30195 = Fair, med-fast. Excellent Morse. No errors '463' 740 30 = 45643 45696 = Weak/fair. Very fast. Extra 4 between ending DKs   | BR<br>AB/BR/HFD<br>AB/BR<br>BR<br>BR          | SAT<br>SAT<br>SAT<br>SAT<br>SAT         |
| 6510    | 0700z<br>0700z  | 12 Sep<br>19 Sep   | '463' $588\ 30 = 46573\ \dots\ 85734 = $<br>'463' $358\ 30 = 30782\ \dots\ 28943 = $ Started fair faded to weak. Many grps with no pauses  | AB<br>BR                                      | SUN<br>SUN                              |
| October | 2021:   |  |  |   |   |
| 5020    | 2000z<br>2000z<br>2000z<br>2000z<br>2000z<br>2000z                            | 05 Oct<br>12 Oct<br>14 Oct<br>19 Oct<br>21 Oct<br>26 Oct                               | '463' 408 30 = 68097 78787 = Weak/Fair, fast. Poor copy. Part msg repeated? '463' 465 30 = 35465 46578 = Weak/Fair, fast. Difficult copy at times due to QSB  Very weak – No useful copy '463' 860 30 = 98456 60708 = Good, fast. Excellent Morse. No errors. Perfect sending '463' 151 30 = 12321 65456 = Weak/Fair, fast. Poor copy. Many grps using few numbers '463' 707 30 = 09089 76889 = Weak, fast. No errors noted. Via Twente – V.weak in UK   |   | TUE<br>TUE<br>THU<br>TUE<br>THU<br>TUE  |
| 5475    | 1800z<br>1800z<br>1800z<br>1800z<br>1800z                                     | 05 Oct<br>07 Oct<br>12 Oct<br>21 Oct<br>26 Oct   | '463' 323 30 = = 32094 87923 = Fair, fast. Errors noted. Gps using 12345 45678 noted '463' 878 = 30 = = 93054 18256 = Fair, fast. Many very similar grps. Format 4 '463' 221 = 30 = = 46537 38676 = Weak, med-fast. Format 4 format used at start of msg. '463' 150 = 30 = = 12321 54345 = Weak/Fair, Fast. Poor copy Format 4 '463' 547 30 = = 64756 36098 = Weak, fast. Two errors noted. Via Twente – V.weak in Uk  | BR<br>BR<br>BR<br>BR<br>(BR                   | TUE<br>THU<br>TUE<br>THU<br>TUE         |
| 6260    | 1500z<br>1500z<br>1500z   | 02 Oct<br>09 Oct<br>23 Oct   | '463' 115 = 30 = 21345 76896 = Fair, fast. One repeat error noted. Format 4 '463' 828 30 = 36524 36547 = Fair, fast. Several errors. Pause before ending DK GC '463' 163 30 = 64523 27451 = Fair, fast. Excellent Morse. One noted error grp07   | BR<br>BR<br>BR                                | SAT<br>SAT<br>SAT                       |
| 6510    | 0700z   | 03 Oct   | '463' 545 30 = = 10938 84732 = = Fair, med-fast. Excellent Morse. No errors  | BR  | SUN                                     |

#### M01a (From Feb 2016 M01a has been redefined to cover all M01 variants - excepting M01b)

A number of regular schedules have been reported & Logged by Edd Smith – See ENIGMA 2000 Newsletter 116 for details.

Logs are shown as continuous. In practice there are often pauses between lines – Often quite lengthy pauses.

| -    |              | _      |  |              |     |
|------|--------------|--------|--|--------------|-----|
| 4028 | 0755z        | 10 Sep | 676 (x4)<br>111 000  | F5JBR        | FRI |
| 4498 | 0825z        | 10 Sep | 333 60761 (x3)<br>333 60478  | F5JBR        | FRI |
| 4932 | 0837z        | 10 Sep | 111 999<br>103 10 = 34309 53261 19574 74299 21002 28972 = 103 10<br>111 000 (Via SDR Finland)  | F5JBR        | FRI |
| 4886 | 1305 - 1309z | 10 Sep | 683 000 (x3)   | F5JBR        | FRI |
| 4824 | 1322 – 1329z | 10 Sep | 613 000 (x4) (Via SDR Finland)   | F5JBR        | FRI |
| 4808 | 1333z        | 10 Sep | 738 (x3) 20463 (x2) (Via SDR Finland) 333 20450 (x2)   | F5JBR        | FRI |
|      |              |        | 111 999<br>187 10 = 77322 09242 23599 44430 74886 37366 08645 12952 67142 15899 = 187 10<br>111 = 44430<br>111 000                   |              |     |
| 4227 | 1350z        | 10 Sep | 407 (x3) 49760 (x2) (Via SDR Finland)<br>111 000   | F5JBR        | FRI |
| 4498 | 1405z (IP)   | 10 Sep | 93511 (Via SDR Finland) 111 333 (x2) 333 61915 (x2) 333 61915 (x2) 436 61915 (x2)  | F5JBR        | FRI |
| 4542 | 1409 - 1412z | 10 Sep | 433 (x3) 65939 (x2) (Via SDR Finland) 111 000  | F5JBR        | FRI |
| 4574 | 1422z        | 10 Sep | 593 593 593 000 (x3) (Via SDR Finland)   | F5JBR        | FRI |
| 4542 | 0815 - 0825z | 11 Sep | 433 (x3) 65778 (x2)<br>111<br>433 (x3) 65815 (x2)<br>111<br>111 000  | F5JBR        | SAT |
| 4976 | 1250z        | 13 Sep | 111 999<br>098 10 = 75124 02301 74102 43625 56763 45656 87978 87907 34245 85631 = 098 10<br>111 000                                  | F5JBR        | MON |
| 4282 | 1311z        | 13 Sep | 903 (x3) 16360 (x2)<br>903 (x3) 16379 (x2)   | F5JBR        | MON |
| 4227 | 1436z        | 13 Sep | 074 (x3) 28158 (x2)<br>111   | F5JBR        | MON |
| 4117 | 1440z        | 13 Sep | 111 333 22<br>111 000  | F5JBR        | MON |
| 4012 | 1644z        | 13 Sep | 111 333 118 333 111 333 120 111 333 121 111 333 129 111 333 133 111 333 137 333 137 111 3333 140 111 333 144 333 144 111 000 111 000 | F5JBR        | MON |
| 5898 | 0652z (IP)   | 14 Sep | In progress. Groups 5 Figures = 423 15 111 000   | F5JBR        | TUE |
| 5898 | 0702z 273    | 14 Sep | 273 (x3) 63578 (x2)<br>111 999   | F5JBR        | TUE |
|      |              |        | 647 12 = 56811 63604 52091 72704 83832 89920 51379 41745 57137 66085 22560 45 111 000  | 615 = 647 12 |     |

| 6798   | 0900z     | 750     | 14 Sep | 750 (x3) 37311 (x2)<br>750 (x3) 37561 (x2)  | F5JBR   | TUE |
|--------|-----------|---------|--------|---|---------|-----|
| 4641   | 0835z     |         | 17 Sep | 333<br>111 = 03611 54205 85631<br>111 000   | F5JBR   | FRI |
| 4641   | 0907z     |         | 17 Sep | 111 999<br>349 10 = 45120 24561 14523 64852 77117 75361 12109 86102 75423 45957 = 349 10<br>111 000   | F5JBR   | FRI |
| 4641   | 0920z     |         | 17 Sep | 375 (x3) 82340 (x2)<br>375 (x3) 111<br>111 999<br>985 10 = 14230 43625 56763 35656 88978 87907 34245 23421 46588 12342 = 985 10<br>111 000  | F5JBR   | FRI |
| 4836   | 0943z     |         | 17 Sep | 182 (x3) 17918 (x2)<br>182 (x3) 17041 (x2)<br>111 999<br>830 10 = 09854 14230 75423 45957 24851 14230 24654 12345 32141 67657 = 830 10<br>111 000   | F5JBR   | FRI |
| 5106.1 | 1557 (IP) | - 1700z | 22 Sep | Training Log (Fair via SDR Silec, Poland)   | E.SMITH | WED |
|        |           |         |        | Machine sent slowly with good timing. * = Operator error.   |         |     |
|        |           |         |        | 597 (x3) 111 111 02059 02059 333 04349 04349 (Rx5) 333 00672 00672 (Rx5) 333 01472 01472 (Rx3) 333 05961 05961 (Rx6) [Switched to hand sent] 597 (x3) 333 06368 06368 (Rx8) 597 (x3) 333 09464 09464 (Rx8) 111 999 98518 = 54679 58023 38* 39087 00062 7* *1 99501 9642 99 111 98518 = 54679 58023 38951 49087 00062 78349 71852 87551 99501 34588 21195 69642 99365 62750 97998 51861 63477 29998 = 985 18 111 54679 111 99501 34588 111 29998 111 999 8751 = 28595 = 8751 |         |     |

Switches back to hand keying. Judging by the slow amateur keying start and then sudden speed increase I would say it was a previously recorded sample. Playback of hand sent recordings can be common in the Tuesday to Friday Schedule.

040 02 (Rx2) 597 (Rx5) 111 0 0 0

040 02 (x2)

040 02

597 (x5) 333 145 (x4) 597 (x3) 18386 18386 (Rx8)

After a fifteen minute pause in activity M32a traffic sends on this this frequency.

V V V RFX42...

Recorder left on until 1930z, no more M01a traffic was sent.

```
5221 0721x 08 Oct 123 123 73872 73979 AB FRI
123 123 123 73979 73979
123 123 123 73979 73979
123 123 123 73977 7397
123 123 123 73497 73497
123 123 123 73497 73497
123 123 123 73497 73497
123 123 123 73497 73497
123 123 123 123 73497 73497
123 123 123 123 000
```

M12 IB ICW, some MCW / CW, short 0. Reuses many freqs year on year.

New ID's may be only for the month/sched shown, but not necessarily unknown. The reason for their reuse, some after long periods of time is unknown.

#### Out of Course Transmissions (Unscheduled)

More unscheduled transmissions from M12 logged by our Morse team on 21 & 22 September. First we have this intercept by Edd Smith who reports that this transmission on 12158 kHz was sent 40 minutes after an X06 transmission logged 1 kHz lower on 12157 kHz. Whether there is any connection between the X06 & M12 transmissions is unknown.

12157 0759 - 0810z21 Sep X06 (In progress) 165423 (Via SDR Eschende) USB E.SMITH TUE 068 1 (9838 240) 79117 23394 ... 45009 90012 000 000 12158 0850 - 0912z21 Sep (Via SDR Eschende) CW E.SMITH TUE

068 (x3) 1 [43secs] 068 (x3) 1 [40secs] 068 (x3) 1 [41secs] 068 (x3) 1 [21secs] 068 1 [Rx2m20s] 9838 240 9838 240

79117 23394 85428 33030 42586 89684 54480 60416 85978 63392 58945 44248 37458 30621 28962 83700 45758 75025 27023 10494 57179 69217 16234 80960 80469 58621 78855 73961 82854 55685 01786 52573 72009 27687 40342 61813 92770 51099 47124 52852 89700 08350 44444 54204 17682 79006 32395 95760 78595 03789 09710 23873 07286 10584 97606 31632 41216 45283 67939 95634  $98839\ 23747\ 06558\ 85122\ 58657\ 28207\ 75382\ 53813\ 07702\ 01340\ 44308\ 11267\ 31670\ 52723\ 56991\ 80636\ 05703\ 32291\ 40249\ 90007$ 84115 74390 05996 83637 39718 43502 70658 53555 88390 91370 54624 86020 49372 08301 48089 46809 30706 33310 83340 85660 07265 73739 18926 42308 65202 15670 90299 67048 06918 03086 62574 55144 27930 16030 61818 05021 74714 64444 15606 26616  $43679\ 54394\ 94927\ 79883\ 72689\ 14755\ 38967\ 38029\ 21504\ 65339\ 37879\ 27888\ 06830\ 15353\ 99691\ 56542\ 50452\ 50165\ 69248\ 62193$  $02809\ 41853\ 51352\ 91204\ 03696\ 96204\ 35602\ 32368\ 41630\ 56619\ 40142\ 75840\ 79800\ 04339\ 78620\ 87390\ 30010\ 34184\ 73950\ 43530$  $03321\ 63834\ 91836\ 78706\ 52581\ 48016\ 42099\ 06894\ 95735\ 54693\ 56464\ 88507\ 83679\ 71836\ 00767\ 04125\ 92170\ 87451\ 20716\ 68047$ 45223 59893 36248 52871 97313 92690 14641 39845 88418 58330 39237 72083 22882 80734 63422 12138 19297 12373 18912 69690  $50083\ 95006\ 50702\ 20910\ 56093\ 84296\ 15123\ 09357\ 61208\ 00980\ 50594\ 80055\ 52145\ 99571\ 36343\ 44002\ 75390\ 10284\ 08801\ 30748$  $15176\ 97150\ 49937\ 98244\ 96721\ 48220\ 36521\ 23620\ 49670\ 08531\ 58309\ 47852\ 14856\ 74714\ 61930\ 00920\ 52904\ 53426\ 45009\ 90012$ 000 000 [1m20secs1 068 (x3) 1 [44secs] 068 (x3) 1 Frequency monitored until 1020z, no further traffic.

Andre, (F5JBR), followed this up with two logs from the morning of 22 September - which used the same ID, 068, but on different frequencies. It's interesting to note that although different messages were sent, the message length for both days was 240 groups.

8157 0810 - 0826z22 Sep 068 1 (x3) (3034 240) 66789 93673 ... 43534 16023 36970 69253 06334 ... / ... 000 000 F5JBR WED 068 1 (x3) (3034 240) 43534 16023 36970 69253 06334 ... / ... 000 000

F5JBR

WED

Ary, (AB), has submitted a log of the complete message for 22 Sep;

22 Sep

068 068 068 1 3034 240 3034 240

66789 93673 43535 65661 16023 36970 69253 06334 72319 60313 03726 96545 33877 51095 02223 92826 32840 21083 31970 33643 59352 70586 77272 15475 30161 93510 66490 38212 16226 68158 78899 58733 45379 02378 33253 77995 02032 77595 50887 62426 40065 36351 79882 24051 27313 25477 53631 58378 14977 52954 12903 61233 81686 42477 40260 88637 06825 24604 36040 78003  $27170\ 19294\ 75862\ 23333\ 05424\ 80850\ 07504\ 24124\ 31656\ 87318\ 64763\ 62932\ 01694\ 09810\ 81190\ 89956\ 06673\ 50967\ 94793\ 14706$ 89210 43854 73371 45958 09130 33158 42887 04478 21310 61088 64116 97817 12270 54400 90166 86034 23372 90628 36307 98614 16078 63457 27464 78540 57227 36196 90892 52685 65155 51659 03119 34894 01587 19549 52793 96762 29595 69799 14635 40374 65264 86270 76262 05520 21557 15338 83926 66957 06991 42915 95061 40793 22882 47005 36040 52632 96289 32301 69025 87067 72951 34565 23464 69099 13999 45892 71054 66766 86749 34378 87175 42967 76538 13827 92430 46496 91004 09200 46098 21368  $96109\ 53871\ 78007\ 55497\ 10822\ 21548\ 33816\ 20018\ 71592\ 66013\ 66486\ 88977\ 37487\ 49834\ 55300\ 95996\ 51311\ 78957\ 40245\ 97618$ 68667 03386 39001 24270 50360 52481 29700 74730 45084 50133 54812 54062 74874 31903 86865 00424 41515 80584 23112 06341  $41195\ 85252\ 59817\ 68715\ 25151\ 44735\ 46010\ 39667\ 28059\ 25946\ 19188\ 80570\ 38997\ 89713\ 61043\ 45568\ 84274\ 55121\ 34853\ 49070$ 38754 98754 34991 85152 37490 22419 54754 16174 67688 84944 87557 63906 74659 97440 23416 50611 73061 78288 77107 21188 000 000

Followed by this log - also from Ary;

0850 - 0906z

8148

1830z 068 1 (1784 5) 83999 31290 02980 01778 15755 000 000 TUE 8157 28 Sep AB 1840z  $068\ 1\ (1784\ 5)\ 83999\ 31290\ 02980\ 01778\ 15755\ 000\ 000$ 8147 28 Sep AB TUE

And more observations from PoSW:

068 1 (4397 1) 03400 000 000 8157 1500z 08 Oct (No repeat heard at 1520z) PoSW FRI

Nothing heard on most of the following days on these frequencies but something heard on the 14th which may have been from the same source:-

8157 14 Oct Tuned in a bit after the hour in time to hear digital-data type signal, ended a few secs afterwards. PoSW THU 1520z 7649 14 Oct Similar data signal as heard earlier, lasted approx. 50 seconds. **PoSW** THU

Listened on most days at 1500z, 4 PM UK time but nothing further heard - although on Friday 29-October there was a strong "XJT" churning away on 8157, or very close to it, not noticed before.

(Thanks Peter. The appearance of XJT / STANAG signals on active frequencies is frequently noted – Maybe it's just coincidence)

#### **Regular M12 Schedules**

#### Asiatic M12 Logs

| 10836/10136/9136  | 0700/20/40z<br>0700/20/40z |        | 811 1 (8633 184)<br>811 1 (8633 184) | 13523 46840etc.<br>13523etc. | (Via Hong Kong SDR)<br>(Via Chinese SDR) | HFD/RNGB<br>RNGB | THU<br>THU |
|-------------------|----------------------------|--------|--------------------------------------|------------------------------|--|------------------|------------|
| 14942/13942/12142 | 0010/30/50z                | 20 Sep | 991 1                                |                              | (Via Japan SDR)                          | HFD              | MON        |
| 17429/16219/15929 | 0010/30/50z                | 11 Oct | 429 1                                |                              |  | HFD              | MON        |

#### European M12 Logs

| September 2021:   | New scheds in bold   | type   |  |  |  |   |   |
|-------------------|--|--|--|--|--|---|---|
| 6942/8142/9284    | 0030/0050/0110z<br>0030/0050/0110z<br>0030/0050/0110z<br>0030/0050/0110z<br>0030/0050/0110z<br>0030/0050/0110z<br>0030/0050/0110z  | 03 Sep<br>07 Sep<br>10 Sep<br>14 Sep<br>17 Sep<br>21 Sep<br>28 Sep   | 912 000<br>912 000<br>912 000<br>912 000<br>912 000  | 89047 00592 09332 56827 000 00 30776 60242 27430 17164 000 000   |  | AB Gert/HFD Gert Gert Gert Gert Gert Gert   | FRI<br>TUE<br>FRI<br>TUE<br>FRI<br>TUE<br>WED                           |
| 7961/6861/5861    | 2100/20/40z<br>2100/20/40z<br>2100/20/40z<br>2100/20/40z<br>2100/20/40z  | 04 Sep<br>11 Sep<br>17 Sep<br>18 Sep<br>25 Sep   | 988 1 (4148 120)<br>988 000<br>988 000<br>988 000<br>988 000   | 96596 26497 66265 00618 000 000  | )  | BR/Gert/HFD/Kopf<br>BR/Gert<br>BR/Gert<br>BR/Gert<br>BR   | SAT<br>SAT<br>FRI<br>SAT<br>SAT   |
| 9246/8146/6846    | 2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z<br>2110/30/50z  | 02 Sep<br>06 Sep<br>09 Sep<br>13 Sep<br>16 Sep<br>20 Sep<br>23 Sep<br>27 Sep<br>30 Sep   | 218 1 (7083 97)<br>218 000<br>218 000<br>218 000<br>218 000<br>218 1 (3882 92)<br>218 1 (3882 92)<br>218 1 (3882 92)<br>218 1 (3882 92)  | 98652 06648 30346 43395 000 00<br>52381 17915 62221 07631 000 00 | 00   | AB BR/Gert BR/Gert/HFD BR/Gert BR/Gert BR/Gert BR BR/Gert BR  | THU<br>MON<br>THU<br>MON<br>THU<br>MON<br>THU<br>TUE<br>THU             |
| 9317/10484/11552  | 0530/0550/0610z<br>0530/0550/0610z<br>0530/0550/0610z<br>0530/0550/0610z   | 07 Sep<br>14 Sep<br>21 Sep<br>28 Sep   | 135 1 (2536 109)   | 88244 75158 71824 16312 000 0  | 00   | Gert/HFD<br>Gert<br>Gert/XAH<br>Gert  | TUE<br>TUE<br>TUE<br>WED  |
| 10836/10136/9136  | 0700/20/40z  | 02 Sep   | 811 1 (8312 144)   | 26916 12894 37770 49828 000 00   | 00   | AB  | THU   |
| 11109/10309/9209  | 2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z<br>2000/20/40z  | 02 Sep<br>06 Sep<br>09 Sep<br>13 Sep<br>16 Sep<br>20 Sep<br>23 Sep<br>27 Sep<br>30 Sep   | 385 1 (302 90)<br>385 000<br>385 000<br>385 1 (109 100)<br>385 1 (109 100)<br>385 1 (109 100)<br>385 1 (109 100)<br>385 000<br>385 000   | 79697 62814 19660 40666 000 00<br>00080 82733 08494 16064 000 00<br>00080 82733 08494 16064 000 00<br>00080 82733 08494 16064 000 00<br>00080 83733                    | 00   | AB/BR/HFD<br>Gert<br>BR/Gert<br>BR/Gert<br>BR/Gert<br>BR/Gert<br>BR<br>BR/Gert<br>BR/Gert                     | THU<br>MON<br>THU<br>MON<br>THU<br>MON<br>THU<br>TUE<br>THU             |
| 12162/11566/10711 | 1710/30/50z<br>1700/20/40z<br>1800/20/40z<br>1710/30/50z<br>1700/20/40z<br>1800/20/40z<br>1710/30/50z<br>1700/30/50z<br>1700/30/50z<br>1710/30/50z<br>1700/20/40z<br>1800/20/40z<br>1710/30/50z<br>1700/20/40z<br>1710/30/50z<br>1700/20/40z<br>1800/20/40z<br>1800/20/40z | 01 Sep<br>02 Sep<br>02 Sep<br>08 Sep<br>09 Sep<br>09 Sep<br>15 Sep<br>16 Sep<br>16 Sep<br>22 Sep<br>23 Sep<br>23 Sep<br>29 Sep<br>30 Sep<br>30 Sep | 546 1 (1212 112)<br>546 1 (8455 105)<br>546 1 (9126 111)<br>546 1 (4893 111)<br>546 1 (6011 113)<br>546 1 (5510 107)<br>546 1 (3155 110)<br>546 1 (7575 109)<br>546 1 (9973 107)<br>546 1 (4310 106)<br>546 1 (5447 112)<br>546 1 (9663 105)<br>546 1 (4359 107) | 98714 11501  | 00<br>00<br>00<br>00<br>00<br>00<br>00<br>00<br>00 | AB/Gert/HFD AB/BR/HFD BR/XAH Gert BR/Gert/XAH Gert BR/Gert BR/Gert BR/Gert BR/Gert BR/Gert BR/Gert BR/Gert BR | WED THU WED THU WED THU WED THU WED THU WED THU THU WED THU THU WED THU |
| 12218/11118/10218 | 2210/30/50z<br>2210/30/50z<br>2210/30/50z<br>2210/30/50z<br>2210/30/50z<br>2210/30/50z<br>2210/30/50z  | 01 Sep<br>04 Sep<br>11 Sep<br>15 Sep<br>18 Sep<br>25 Sep<br>29 Sep   | 212 1 (698 46)<br>212 1 (698 46)<br>212 1 (707 58)<br>212 000<br>NRH<br>212 1 (9114 84)<br>212 1 (171 36)  |  | 00   | AB/BR/Gert/HFD<br>BR/Gert<br>BR/Gert<br>Gert<br>BR<br>BR<br>BR  | WED<br>SAT<br>SAT<br>WED<br>SAT<br>SAT<br>WED                           |
| 13386/12189/11491 | 1110/30/50z<br>1110/30/50z<br>1110/30/50z  | 02 Sep<br>09 Sep<br>23 Sep   | 725 1 (3511 96)<br>725 1 (5709 93)<br>725 1 (8013 96)  | 62354 10138 90215 98161 000 00<br>42728 15215 81101 19978 000 00<br>70416 72759  |  | AB/E.SMITH/HFD<br>BR/Gert<br>BR   | FRI<br>THU<br>THU   |
| 14377/13461/12114 | 2000/20/40z<br>2000/20/40z<br>1130/1150/1210z<br>2000/20/40z<br>1130/1150/1210z<br>1130/1150/1210z<br>2000/20/40z  | 02 Sep<br>09 Sep<br>13 Sep<br>16 Sep<br>20 Sep<br>27 Sep<br>30 Sep   | 317 1 (5063 109)<br>317 1 (6536 110)<br>317 1<br>317 1 (7783 102)<br>317 1 (5137 93)<br>317 1 (1846 99)<br>317 1   | 766 .3 99155<br>22252 74358 64052 10193 000 00<br>22976 60523 43453 59895 000 00   | 00   | AB/BR/HFD<br>BR<br>HFD<br>BR<br>Gert<br>Gert<br>BR  | THU<br>THU<br>MON<br>THU<br>MON<br>MON<br>THU                           |

| 14927/1392712227  | 1600/20/40z                        | 01 Sep           | 992 000                              |  | Gert/HFD            | WED        |
|-------------------|------------------------------------|------------------|--------------------------------------|--|---------------------|------------|
|                   | 1600/20/40z                        | 05 Sep           | 992 000                              |  | BR/Gert/XAH         | SUN        |
|                   | 1600/20/40z                        | 08 Sep           | 992 000                              |  | XAH                 | WED        |
|                   | 1600/20/40z                        | 12 Sep           | 992 000                              |  | Gert/XAH            | SUN        |
|                   | 1600/20/40z                        | 15 Sep           | 992 1 (661 68)                       | 68140 10205 9903 78957 000 000                                     | Gert/ XAH           | WED        |
|                   | 1600/20/40z                        | 22 Sep           | 992 000                              |  | Gert/XAH            | WED        |
| October 2021:     |                                    |                  |                                      |  |                     |            |
| 5704/5704/9004    | 2100/20/40                         | 01.0             | 770 1 (2020 140)                     | 02072 25072  | D.D.                | EDI        |
| 5794/6794/8094    | 2100/20/40z                        | 01 Oct           | 770 1 (3039 140)                     |  | BR                  | FRI        |
|                   | 2100/20/40z<br>2100/20/40z         | 02 Oct<br>08 Oct | 770 1 (3039 140)                     | 92862 25962 26742 87099 000 000                                    | Gert<br>Gert        | SAT<br>FRI |
|                   | 2100/20/40z<br>2100/20/40z         | 15 Oct           | 770 000                              |  | Gert                | FRI        |
|                   | 2100/20/40z                        | 16 Oct           | 770 000                              |  | Gert                | SAT        |
|                   | 2100/20/40z                        | 22 Oct           | 770 1 (632 95)                       | 01478 27814 78300 05557 000 000                                    | BR/Gert             | FRI        |
|                   | 2100/20/40z                        | 23 Oct           | 770 1 (632 95)                       | 01478 27814 78300 05557 000 000                                    | Gert                | SAT        |
| 6927/9027/0227    | 0020/0050/0110-                    | 05.0-4           | 902 000                              |  | Cont                | TILE       |
| 6837/8037/9237    | 0030/0050/0110z<br>0030/0050/0110z | 05 Oct<br>08 Oct | 802 000<br>802 000                   |  | Gert<br>Gert        | TUE<br>FRI |
|                   | 0030/0050/0110z                    | 12 Oct           | 802 1 (307 91)                       | 05816 60514 15091 99197 000 000                                    | Gert/HFD            | TUE        |
|                   | 0030/0050/0110z                    | 12 Oct           | 802 1 (307 91)                       | 03810 00314 13031 33137 000 000                                    | Gert                | TUE        |
|                   | 0030/0050/0110z                    | 22 Oct           | 802 000                              |  | Gert                | FRI        |
|                   | 0030/0050/0110z                    | 26 Oct           | 802 1 (3057 67)                      | 68687 09740 06181 60272 000 000                                    | Gert                | TUE        |
|                   | 0030/0050/0110z                    | 28 Oct           | 802 1 (3057 67)                      | 68687 09740 06181 60272 000 000                                    | Gert                | THU        |
| 9164/6064/5764    | 2110/20/50-                        | 04.0-4           | 107.000                              |  | DD/Ct               | MON        |
| 8164/6964/5764    | 2110/30/50z<br>2110/30/50z         | 04 Oct<br>07 Oct | 197 000<br>197 000                   |  | BR/Gert<br>Gert/HFD | MON<br>THU |
|                   | 2110/30/50z<br>2110/30/50z         | 11 Oct           | 197 1 (5998 95)                      | 78920 83588 82311 14246 000 000                                    | BR/Gert/HFD         | MON        |
|                   | 2110/30/50z<br>2110/30/50z         | 18 Oct           | 197 1 (5998 95)                      | 78920 83588 82311 14246 000 000<br>78920 83588 82311 14246 000 000 | Gert                | MON        |
|                   | 2110/30/50z                        | 21 Oct           | 197 1 (5998 95)                      | 78920 83588 82311 14246 000 000                                    | BR/Gert             | THU        |
|                   | 2110/30/50z                        | 25 Oct           | 197 000                              | 70,20 03300 02311 11210 000 000                                    | Gert                | MON        |
|                   | 2110/30/50z                        | 28 Oct           | 197 000                              |  | Gert                | THU        |
| 0217/10/04/11/552 | 0520/0550/0610-                    | 05.0-4           | 125 1 (4040 107)                     | 50011 19772 27452 79220 000 000                                    | Cont                | TILE       |
| 9317/10484/11552  | 0530/0550/0610z<br>0530/0550/0610z | 05 Oct<br>19 Oct | ,                                    | 50911 18672 26452 68320 000 000<br>01637 79899 90573 80884 000 000 | Gert<br>Gert        | TUE<br>TUE |
|                   | 0530/0530/0610z<br>0530/0050/0610z | 26 Oct           | ,                                    | 85594 55433 99591 37210 000 000                                    | Gert                | TUE        |
|                   |                                    |                  |                                      |  |                     |            |
| 10318/9218/8118   | 2000/20/40z                        | 04 Oct           | 178 1 (9347 96)                      | 34348 15912 68802 44347 000 000                                    | Gert/HFD            | MON        |
|                   | 2000/20/40z                        | 07 Oct           | 178 1 (9347 96)                      | 34348 15912 68802 44347 000 000                                    | Gert                | THU        |
|                   | 2000/20/40z                        | 11 Oct           | 178 000                              |  | BR/Gert             | MON        |
|                   | 2000/20/40z                        | 14 Oct           | 178 000                              |  | BR/Gert             | THU        |
|                   | 2000/20/40z                        | 18 Oct           | 178 1 (3536 63)                      | 70089 17779 Rest unreadable  | Gert                | MON        |
|                   | 2000/20/40z                        | 21 Oct           | 178 1 (3536 63)                      | 70089 17979 00023 94695 000 000                                    | BR/Gert             | THU        |
|                   | 2000/20/40z<br>2000/20/40z         | 25 Oct<br>28 Oct | 178 1 (3536 63)<br>178 1 (3536 63)   | 70089 17979 00023 94695 000 000<br>70089 17979 00023 94695 000 000 | BR/Gert<br>Gert     | MON<br>THU |
|                   | 2000/20/402                        | 20 001           | 176 1 (3330 03)                      | 70007 17777 00023 74073 000 000                                    | GCIT                | 1110       |
| 10936/9336/8136   | 2210/30/50z                        | 02 Oct           | 931 1 (171 36)                       | 77701 58135 78413 18061 000 000                                    | BR/Gert             | SAT        |
|                   | 2210/30/50z                        | 06 Oct           | (                                    | 84609 46045  | BR                  | WED        |
|                   | 2210/30/50z                        | 16 Oct           | 931 1 (9630 86)                      | 12778 52440 72603 19715 000 000                                    | Gert/HFD            | SAT        |
| 11135/10235/9235  | 1900/20/40z                        | 06 Oct           | 122 1 (1463 81)                      | 82392 00574 26990 73745 000 000                                    | AB                  | WED        |
|                   | 1900/20/40z                        | 08 Oct           | 122 1 (1463 81)                      | 82392 00574 26990 73745 000 000                                    | Gert                | FRI        |
|                   | 1900/20/40z                        | 13 Oct           | 122 000                              |  | BR/Gert             | WED        |
|                   | 1900/20/40z                        | 15 Oct           | 122 000                              |  | Gert                | FRI        |
|                   | 1900/20/40z                        | 22 Oct           | 122 1 (700 74)                       | 81256 90171  | BR                  | FRI        |
|                   | 1900/20/40z                        | 27 Oct           | 122 000                              |  | BR/Gert             | WED        |
| 11435/10598/9327  | 1800/20/40z                        | 16 Oct           | 938 1 (3652 79)                      | 08321 58953 68659 86837 000 000                                    | Gert                | SAT        |
| 12162/11566/10711 | 1710/30/50z                        | 06 Oct           | 546 1 (3148 110)                     | 63024 90657 92188 64333 000 000                                    | BR/Gert             | WED        |
|                   | 1700/20/40z                        | 07 Oct           | ( /                                  | 75037 34993 59409 42772 000 000                                    | BR/Gert             | THU        |
|                   | 1800/20/40z                        | 07 Oct           |                                      | 47356 30395 11057 44567 000 000                                    | BR/Gert             | THU        |
|                   | 1710/30/50z                        | 13 Oct           | 546 1 (4469 104)                     | 87551 00208 85164 83875 000 000                                    | BR/Gert             | WED        |
|                   | 1700/20/40z                        | 14 Oct           | 546 1 (7835 108)                     | 75946 50869 91318 24420 000 000                                    | BR/Gert             | THU        |
|                   | 1800/20/40z                        | 14 Oct           | 546 1 (1260 110)                     | 69075 42614 38108 10249 000 000                                    | BR/Gert             | THU        |
|                   | 1710/30/50z                        | 20 Oct           | ,                                    | 32133 64427  | BR                  | WED        |
|                   | 1700/20/40z                        | 20 Oct           | 546 1 (2294 107)                     |  | BR                  | THU        |
|                   | 1800/20/40z                        | 21 Oct           |                                      | 46478 90183 72724 98734 000 000                                    | BR/Gert             | THU        |
|                   | 1720/30/50z                        | 27 Oct           | , ,                                  | 03329 52758 70316 17806 000 000                                    | Gert                | WED        |
|                   | 1700/20/40z<br>1800/20/40z         | 28 Oct<br>28 Oct | 546 I (2308 II3)<br>546 I (1628 108) | 20718 60112 70412 17751 000 000<br>15429 16247                     | BR/Get<br>BR        | THU<br>THU |
|                   |                                    |                  | `                                    |  |                     |            |
| 13386/12189/11491 | 1110/30/50z                        | 14 Oct           | 725 1 (8841 98)                      | 26652 86976 47039 47727 000 000                                    | Gert                | THU        |
| 14377/13461/12114 | 1130/1150/1210z                    | 11 Oct           | 317 1 (5033 90)                      | 56600 41071 58856 48400 000 000                                    | Gert                | MON        |
| 17441/18641/19241 | 0800/20/40z                        | 06 Oct           | 462 000                              |  | Gert                | WED        |
|                   | 0800/20/40z                        | 13 Oct           | 462 1 (709 59)                       | 42304 20250 92736 28126 000 000                                    | Gert                | WED        |
|                   | 0800/20/40z                        | 17 Oct           | 462 1 (709 59)<br>462 000            | 42304 20250 92736 28126 000 000                                    | Gert/HFD            | SUN        |
|                   | 0800/20/40z                        | 24 Oct           | 462 000                              |  | Gert                | SUN        |

20168/19468/16268 1400/20/40z 11 Oct 142 1 (621 79) 71819 05792.... AB/Gert MON 1400/20/40z 28 Oct 142 000 Gert THU

M12 6942/8142/9284kHz 0030/0050/0110z 03 Sep 2021

912 912 912 1 (R2m) 389 76 389 76

89047 00592 33453 77522 47131 38402 63616 41663 65602 58539 81203 78787 94255 78491 91163 03177 58328 01015 01726 79509 45894 84186 27158 11485 24962 55823 00557 38602 18726 00142 75700 32907 58500 10314 10803 50483 97247 69114 22150 64168 72500 63170 29873 63970 13970 05689 87596 20062 88371 21916 92786 05121 37148 74725 04084 49396 34212 72200 24945 36594 50588 75610 34816 88861 30867 36845 41709 79805 68564 82216 79010 85731 11865 30671 09332 56827 000 000

Courtesy AB

M12 17441/18641/19241kHz 0800/0820/0840z 17 Oct 2021

462 462 462 1 (R2m) 709 59 709 59

42304 20250 88544 75150 58221 85873 57803 64654 60443 23476 17668 67359 61470 33295 73902 52948 60644 91931 83868 23657 71427 13571 99898 26578 14242 21700 77919 75992 81755 16347 86332 18458 93438 30380 12180 40931 15044 33924 80795 51174 52500 03900 39600 24795 43393 74606 82041 21019 89721 77669 79064 83343 04090 21045 56225 46164 92736 28126 00000

Courtesy Gert

M14 IA MCW / ICW Short 0

September 2021:

| 10243 | 0520z<br>0520z | 07 Sep<br>13 Sep | 952 (730 51) = 92628<br>952 (603 53) = 70340 53399 58797 48664 = 603 5 | 53 00000      | CW | HFD<br>AB | TUE<br>MON |
|-------|----------------|------------------|--|---------------|----|-----------|------------|
| 12211 | 0500z<br>0500z | 07 Sep<br>13 Sep | 952 (730 51) = 92628<br>952 (603 53) = 70340 53399 58797 48664 = 603 5 | 53 00000      | CW | HFD<br>AB | TUE<br>MON |
| 16347 | 0930z<br>0930z | 10 Sep<br>25 Sep | 617 00000<br>617 00000   | (SDR Utwente) |    | AB<br>ER  | FRI<br>SAT |

October 2021:

17458 0930z 25 Oct 617 00000 (SDR Utwente) ER/HFD MON

M14 12211kHz 0500z 13 September 2021

952 (R4m) 603 603 53 53 ==

603 603 53 53 00000

Courtesy AB

<u>M23</u> O ICW

No reports

#### **Morse Stations - Not Number Related**

<u>M51</u> XIX

 $3881/\!/6825 \hspace{1.5cm} 100 \hspace{0.1cm} \text{grp 5-ltr messages with headers}$ 

No reports – M51b format in use

<u>M51a</u> (FAV22) Daily Mon - Fri, Sun & some Sats. See NL 72 for details

3881//6825

02-2/1 Codé 02-2/2 Clair, 02-2/3 Codé, 02-2/4 Clair (600 grps/hr) 1130 - 1200z 05 Oct Mardi-Lecon BR TUE 1130 - 1155z 30 Sep Jeudi- Leçon 24-2/1 Codé, 24-2/2 Clair, 24-2/3 Codé, 24-2/4 Clair (840 grps/hr) BRTHU 1130 - 1203z 01 Oct Vendredi- Leçon 25-2/1 Codé, 25-2/2 Clair, 25-2/3 Codé, 25-2/4 Clair (960 grps/hr) BR FRI

M51b Non-stop 5-character groups composed of M51a messages on 3881//6825kHz

3881//6825

0133z 30 Sep Non-stop 5-character groups composed of M51a messages BR THU

#### <u>M89</u> O

This is a summary of activity from the M89 stations.

#### Traffic & Operator Chat from M89

Traffic & Op. chat reported on the following freqs. (All in kHz).

| 3035 | 4018 | 5191 | 6140 | 7013 | 8001   |
|------|------|------|------|------|--------|
| 3160 | 4043 | 5258 | 6380 | 7560 | 8436   |
| 3174 | 4143 | 5340 | 6543 | 7764 | 8777.2 |
| 3187 | 4238 | 5456 | 6666 | 7962 | 8877   |
| 3612 | 4242 | 5522 | 6812 | 7980 |        |
| 3752 | 4243 | 5555 |      |      |        |
| 3777 | 4254 | 5565 |      |      |        |
| 3800 | 4321 | 5779 |      |      |        |
| 3838 | 4802 |      |      |      |        |
| 3879 |      |      |      |      |        |

| New Scheds for Sen/ Oct 2021: | From logs submitted from JPL & F5JBR |
|-------------------------------|--------------------------------------|

| 4042 | New frequency & Round Slip                                      | First heard 13 September                             | V L5S3 (x3) DE Z4Y6 (x2)                            | F5JBR        |
|------|---|--|---|--------------|
| 4043 | New frequency & Round Slip<br>New Round Slip for this frequency | First heard 01 September<br>First heard 26 September | V L5S3 (x3) DE Z4Y6 (x2)<br>V IW6S (x3) DE 5D6T(x2) | F5JBR<br>JPL |
| 6140 | New frequency for this Round Slip                               | First heard 10 October                               | V IW6S (x3) DE 5D6T(x2)                             | JPL          |
| 7847 | New frequency & Round Slip                                      | First heard 10 October                               | V OST7 (x3) DE EDB8(x2)                             | JPL          |

#### Chart of M89 Freq & Call signs heard in Sep / Oct 2021 New Scheds shown in Bold Type From logs submitted from JPL & F5JBR

| Freq in KHz          | Call Slip   |
|----------------------|---|
| 3565//4718           | V BSA5 (x3) DE TP4C (x2)                            |
| 3565//4718//6378//7  | 7045  |
| 3303//4/10//03/0///  | V BSA5 (x3) DE TP4C (x2)                            |
| 3850/4620//4860//50  | 640//6320//6840                                     |
| 3850/4620//5640//6   | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K          |
| 2020, 1020, 2010, 00 | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K          |
| 4042                 | V L5S3 (x3) DE Z4Y6 (x2)                            |
| 4043                 | V L5S3 (x3) DE Z4Y6 (x2)<br>V IW6S (x3) DE 5D6T(x2) |
| 4620                 | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K          |
| 4620//4860//5640//6  | 5320//6840  |
|                      | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K          |
| 4718                 | V BSA5 (x3) DE TP4C (x2)                            |
| 4718//6378//7045     | V BSA5 (x3) DE TP4C (x2)                            |
| 4718//7045           | V BSA5 (x3) DE TP4C (x2)                            |
|                      |   |

| Freq in kHz             | <u>Call Slip</u>   |
|-------------------------|--|
| 4720//NRH<br>4720//5150 | V WNF(x3) DE FXM (x2) (R5) (Hand sent)<br>V WNF(x3) DE FXM (x2) (R5) (Hand sent) |
| 4860//5640//6920//6     | 320//6840//8290//8360  |
| 4860//5640//6320//6     | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K<br>840//8290//8360                    |
| 40.50.45.40.4520.45     | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K                                       |
| 4860//5640//6320//6     | 840//8290//8360/10640<br>VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K              |
| 5640//6320//6840//8     | 200//9240  |
| 3040//0320//0840//8     | VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K                                       |
| 6140                    | V IW6S (x3) DE 5D6T(x2)  |
| 6543                    | V 8RVF (x3) DE CV4K (x2)   |
| 7045//NRH               | V BSA5 (x3) DE TP4C (x2)   |
| 7620//8350              | V WNF(x3) DE FXM (x2) (R5) (Hand Sent)   |
|                         |  |
| 7847                    | V OST7 (x3) DE EDB8(x2)  |
|                         |  |
|                         |  |

| 3800 |      | 1916z (I | P) 07 Oct | VV BGH DE OKB QSA ? K (U                             | VV BGH DE OKB QSA ? K (Unsure of 1st call sign - run toge |                           | JPL   | THU |
|------|------|----------|-----------|--|---|---------------------------|-------|-----|
| 4018 |      | 1713z (I | P) 10 Sep | NR 2061 10 24 0911 0100 K<br>RMSK TRC99 TO 4AT4 K    |   | (Remote tuner Khabarovsk) | JPL   | FRI |
| 4043 | Z4Y6 | 1333z    | 01 Sep    | Z4Y6 Working L5S3 (only: L5S                         | 63 de Z4Q6 V) in Broadcast                                | (Via SDR Japan)           | F5JBR | WED |
|      | Z4Y6 | 1244z    | 04 Sep    | Z4Y6 Working L5S3 (only: L5S                         | 63 de Z4Q6 V) in Broadcast                                | (Via SDR Japan)           | F5JBR | SAT |
| 4243 |      | 1145z (I | P) 24 Sep | NR 2490 CK 91 53 0924 1800 R                         | MKS BT 9495 TO 6769 AR K                                  | (Remote tuner Japan)      | JPL   | FRI |
| 4254 |      | 1207z (I | P) 24 Sep | RMKS 8479 TO 0006 BT<br>NR 9841 CK 20 47 0924 2000 R | D.T2/R7 AR9 AR<br>MKS 551 K E 8479 TO 0006 K              | (Remote tuner Japan)      | JPL   | FRI |
| 4802 |      | 1918z (I | P) 15 Sep | NR 9107/EX 0318 BT                                   | Q5P4/53W2   | (Remote tuner Hong Kong)  | JPL   | WED |
| 6140 | Z4Y6 | 0915z    | 05 Sep    | Z4Y6 Working L5S3 (only: L5S                         | 63 de Z4Q6 V) in Broadcast                                | (Via SDR Japan)           | F5JBR | SUN |

| 6543   | CV4K | 1202z (IP) 21 Oct | V 8RVF (x3) DE CV4K (x2)<br>NR 381/EX 2000 BT<br>NR 382/EX 2003 BB<br>NR 383/EX 2006 BT<br>NR 384/EX 2009 BT<br>NR 385/EX 2012 BT<br>NR 386/EX 2015 BT | AJB2/C3D4 AR (From Roi<br>F2D9/N8T7 AR<br>P856/M9N5 AR<br>YHU3/T2PJ AR<br>A5B7/IBE . AR<br>OBC3/N9J8 AR | (Remote tuner Japan)<br>and Slip - 1205z) | JPL | THU |
|--------|------|-------------------|--|---|---|-----|-----|
| 7764   | DFG4 | 1102z (IP) 10 Oct | NR 003/EX 1906 BT  | QBZ9/AKR5 AR  | (Remote tuner Novosibirsk)                | JPL | SUN |
| 7962   |      | 1107z (IP) 10 Oct | BT OPR6/AUT3 AR QSY TO   | 25 QSY TO 25 VV   | (Remote tuner Novosibirsk)                | JPL | SUN |
| 7980   |      | 1058z (IP) 24 Sep | BT 615/XZ373/5295/08/72/33/2<br>NR 510 HR WK N 510 NIL SK  |   | (Remote tuner Novosibirsk)                | JPL | FRI |
| 8436   | AQR8 | 1108z (IP)10 Oct  | NR 005/EX 1912 BT  | UFO2/ZTH1 AR  | (Remote tuner Novosibirsk)                | JPL | SUN |
| 8777.2 | VLB7 | 0036z (IP) 10 Oct | NR 3406/EX 0842 BT   | VLB7/W4YIII   | (Remote tuner Quzhou)                     | JPL | SUN |
| 8877   |      | 1936z (IP) 07 Oct | IEC BT 4726 AR K Exercise 1  | related   | (Remote tuner Hong Kong)                  | JPL | THU |

| M89     | 4143kHz   | 1730 (IP) - 1733z         | 12 September 2021  |
|---------|---|---------------------------|--|
| R RPT   | .,  |                           | (IP-1730z)   |
|         | ,   | 1730z) (Other statio      | n N/H on this frequency)                                     |
| R RPT ( |   |                           | (1731z)  |
| R RPT   |   |                           |  |
| R RPT   |   |                           | (1732z)  |
| R RPT   |   |                           |  |
| R R QS  | L QSL 132 EI  | EEE QSL 0132 0132         | K K (1733z)  |
| RRR Sk  | K GB K  |                           | (1733z)  |
| NR 910  | 4802kHz<br>29107/EX 031<br>7/EX 0318 B'<br>7/EX 0318 B' | 18 BT 5P4/53<br>T Q5P4/53 | 15 September 2021<br>BW2 AR (IP – 1918z)<br>BW2 AR<br>BW2 AR |
|         | QSY 12 VVV  |                           | (1919z)  |
|         |   |                           | Courtesy JPL   |

| M89    | 4243kHz      | 1145 (IP) - 1149z | 24 September 2021             |
|--------|--------------|-------------------|-------------------------------|
| 5D43 A | RKK          |                   | (IP - 1145z)                  |
| AS AS  |              | (Othe             | r station also on this freq.) |
| RPT 61 | W K          |                   |                               |
| 61W B  | Г ВТ 763А АБ | ł K               |                               |
| RPT 63 | W K          |                   |                               |
| R RPT  | 63W BT N635  | AR K              | (1146z)                       |
| R QSL  | 1947 AR      |                   |                               |
| R R MS | SG GA K      |                   |                               |
| GA K   |              |                   | (1148z)                       |
|        |              | 53 0924 1800 RMK  | S BT 9495 TO 6769 AR K        |
| R R GA |              |                   |                               |
|        |              |                   | 74UD DUTN 7A65 5D63           |
| 74TN 3 | D67 U4A5 T6  | 4U                | (Cont'd – 1149z)              |
|        |              |                   |                               |
|        |              |                   |                               |
|        |              |                   | Courtesy JPL                  |

#### **M95** O XSV, XSV70, XSV85

| M95 Morse Logs | (Bold type indicates                    | new loggi              | ng)  |  |     |     |
|----------------|---|------------------------|--|--|-----|-----|
| 3642//NRH      | Call Sign 3A7D                          | (Active d              | aily - only first marker log has been included)  |  |     |     |
| 3642//7602     | Call Sign 3A7D                          | (Active d              | aily - only first marker log has been included)  |  |     |     |
| 3955           | 1300 (IP) - 1301z                       | 09 Oct                 | MSG NR 78/CCK CK 41 49 1009 2040 RMKS 51.3 TC  | 0 6403 BT (Remote Chongzuo)                | JPL | SAT |
| 3968//NRH      | Call Sign SAQC (P<br>1714z              | reviously3/<br>30 Sep  |  | OKG6 DE 3A7D<br>(Remote tuner Novosibirsk) | JPL | THU |
| 3968//6936     | Call Sign SAQC (P<br>1816z              | reviously3/<br>12 Sep  | , , , , , , ,  | OKG6 DE 3A7D<br>(Remote tuner Novosibirsk) | JPL | SUN |
|                | 1410z                                   | 07 Oct                 | V YHXD (x3) DE SAQC (x2)   | (Remote tuner Novosibirsk)                 | JPL | THU |
| 4243//NRH      | Message number dif<br>1143 (IP) - 1156z | fers from cu<br>03 Sep | NR 047 CK 28 35 0903 1553 BT<br>NR .3 CK 1735 0903 1629 BT                                   | (Remote tuner Taiwan)                      | JPL | FRI |
|                | 1151 - 1153z                            | 10 Sep                 | NR 06 CK 187 35 0903 17 BT<br>NR 24 CK 173 35 0912 1547 BT                                   | (Remote tuner Japan)                       | JPL | SUN |
|                | 1150 - 1159z                            | 21 Oct                 | NR 044 CK 38 35 1021 1523 BT (Sending unusually slo<br>NR 42 CK 174 35 1021 1540 BT          | ow) (Remote Taiwan)                        | JPL | THU |
|                | 1147 (IP) - 1200z                       | 22 Oct                 | NR 05 CK 25 48 1021 2000 BT<br>NR 44 CK 139 35 1022 1526 BT                                  | (Remote tuner Taiwan)                      | JPL | FRI |
| 4243//9054     | Message number dif                      | fers from cu           | urrent XSV70 and XSV85 message numbers.  |  |     |     |
|                | 1141 (IP) – 1206z                       | 24 Sep                 | NR 026 CK 22 35 0924 1600 BT   | (Remote tuner Japan)                       | JPL | FRI |
|                | 1143 (IP) – 1200z                       | 30 Sep                 | NR 48 CK 141 35 0924 1626 BT<br>NR 002 CK 45 35 0930 1510 BT<br>NR 60 CK 147 35 0930 1610 BT | (Remote tuner Taiwan)                      | JPL | THU |
|                | 1156 (IP) - 1202z                       | 10 Oct                 | NR 022 CK 50 35 1010 1521 BT<br>NR 20 CK 168 35 1010 1547 BT                                 | (Remote tuner Japan)                       | JPL | SUN |

| 4364//8073    | Call Sign XSV85         |            |   |                     |                            |        |      |
|---------------|-------------------------|------------|---|---------------------|----------------------------|--------|------|
|               | 1130 - 1139z            | 03 Sep     | NR 0713 CK 176 35 0903 1558 BT  |                     | (Remote tuner Taiwan)      | JPL    | FRI  |
|               | 1130 - 1151z            | 10 Sep     | NR 0746 CK 487 35 0910 1651 BT  |                     | (Remote tuner Hong Kong)   | JPL    | FRI  |
|               | 1131 - 1145z            | 12 Sep     | NR 0762 CK 272 35 0912 1636 BT  |                     | (Remote tuner Hong Kong)   | JPL    | SUN  |
|               | 1130 - 1140z            | 24 Sep     | NR 08 CK 214 35 0934 1539 BT  |                     | (Remote tuner Hong Kong)   | JPL    | FRI  |
|               | 1131 - 1141z            | 30 Sep     | NR 0812 CK 139 35 0930 1620 BT  |                     | (Remote tuner Hong Kong)   | JPL    | THU  |
|               | 1135 - 1151z            | 10 Oct     | NR 0853 CK 594 35 1010 16UD B   | Γ                   | (Remote tuner Taiwan)      | JPL    | SUN  |
|               | 1141 - 1143z            | 21 Oct     | NR 05 CK 315 35 1021 1619 BT  |                     | (Remote tuner Taiwan)      | JPL    | THU  |
|               |                         |            | (As luck would have it, audio issue                                     | with SDR happens    | when msg nr is being sent) |        |      |
|               | 1130 - 1145z            | 22 Oct     | NR 0910 CK 345 35 1022 1553 BT  |                     | (Remote tuner Hong Kong)   | JPL    | THU  |
|               | 0014 (IP) - 0021z       | 24 Oct     | NR 0918 CK 034 051 1024 0703 B  | Γ                   | (Remote tuner Taiwan)      | JPL    | SUN  |
| 5.470/NIDII   | C-11 C: CA OC           | (A -4: 4   | -: 1 1 6" 4 1 1 1 1 1 1 1   | 1 4 - 4\            |                            |        |      |
| 5479//NRH     | Call Sign SAQC<br>1300z | 04 Sep     | aily - only first marker log has been ir<br>YHXD de SAQC V in Broadcast | iciuded)            | (Via SDR Japan)            | F5JBR  | SAT  |
|               | 13002                   | отвер      | Timb de Brige v in Broadcast  |                     | (Via SER Jupan)            | TSSDIC | 5711 |
| 5479//10722   | Call Sign SAQC          | (Active da | aily - only first marker log has been ir                                | ncluded)            |                            |        |      |
|               | 1104z                   | 03 Sep     | V YHXD (x3) DE SAQC (x2) (IP -  | Cont'd)             | (Remote tuner Novosibirsk) | JPL    | FRI  |
|               |                         |            |   |                     |                            |        |      |
|               | 1057 - 1058z            | 10 Oct     | NR 024/CCK CK 199 1110 1019 R   | MKS CQ BT           | (Remote tuner Novosibirsk) | JPL    | SUN  |
| 6558          | 0051 (IP) - 0550z       | 10 Oct     | 0/CCK CK 19 09 1010 0818 RMKS   | S 8937 TO 8 48 K    | (Remote tuner Quzhou)      | JPL    | SUN  |
| 0220          | 0031 (11) 03302         | 10 000     | NR VVV 8.RD. RD DE KMMX K   |                     | nat indicates M95 family)  | 31 2   | ВСТ  |
|               |                         |            | R HS2I HS2I DE AJYX K   | (Mag Iom            | at maleutes 1175 family)   |        |      |
|               |                         |            | K HS2F HS2F D2 FW FA K  |                     |                            |        |      |
| 7980          | 1205 (IP) - 1210z       | 10 Oct     | RMKS 4482 TO 0320 0072 9.33 98  | 98 9532 8791 BT     | (Remote tuner Japan)       | JPL    | SUN  |
|               |                         |            | MSG NR 22/CCK CK 2 41 1010 20   |                     | ` .                        | BT     |      |
|               |                         |            |   |                     |                            |        |      |
| 8690          | 1115 (IP) - 1119z       | 10 Oct     | IEC BT 6658 AR K (Exercise relate                                       | ed)                 | (Remote tuner Novosibirsk) | JPL    | SUN  |
|               |                         |            | TKF2 TKF2 DE ADWF R QSA 2 (   | QSA ? K             |                            |        |      |
|               |                         |            | IEC BT 6658 AR K  |                     |                            |        |      |
|               |                         |            | NR 045/CCK CK 91 54 1010 1910   | RMKS 4077 TO 40     | 994 BT                     |        |      |
|               |                         |            |   |                     | _                          |        |      |
| 8777          | 0104 (IP) - 0107z       | 10 Oct     | NR 3407/CCK CK 73 24 1010 0900  |                     | (Remote tuner Quzhou)      | JPL    | SUN  |
|               |                         |            | (Msg format indicates M95 family)                                       | (Repeat of above m  | nessage at 0104z)          |        |      |
| 0054/NDH      | C-11 C: VCV05           |            |   |                     |                            |        |      |
| 9054/NRH      | Call Sign XSV85         | 20.0-4     | ND 057 CV 20 25 1021 0617 DT  | (// 4242 NDH)       | (Damasta tamas Tairran)    | IDI    | CAT  |
|               | 2341z                   | 30 Oct     | NR 057 CK 39 35 1031 0617 BT  | ` '                 | (Remote tuner Taiwan)      | JPL    | SAT  |
|               | 0001z                   | 31 Oct     | NR 057 CK 39 35 1031 061 BT (Fronk 063 CK 69 35 1031 0655 BT            | om olu day log - Re | epeats message – 00012)    | JPL    | SUN  |
|               |                         |            | 14K 002 CK 09 23 1031 0033 B1   |                     |                            |        |      |
| 10722//NRH    | Call Sign 3A7D          |            |   |                     |                            |        |      |
| 10/22//INIXII | 0608z                   | 02 Sep     | YHXD de SAQC V  | (//5479 NRH)        | (Via SDR Japan)            | F5JBR  | SAT  |
|               | UUUUL                   | oz sep     | TIMD de BAQC Y  | (//J=//2 INIXII)    | ( via SDK Japan)           | 1 JJDK | SAI  |

| M95      | 4243//9054kHz   | 1141 (IP) - 1206z | 24 September 2021      |   |
|----------|---|-------------------|------------------------|---|
| Switched | ss in voice USB 1141<br>to Chinese digital 4+4<br>to CW - Handsent 11 | QPSK 75/3000 LS   |                        |   |
| VV HR N  | MSG TO YR PSE CY  |                   | (1153z)                |   |
| NR 089 ( | CK 29 35 0924 1508 B  | T                 |                        |   |
|          | Γ TU4 3U6 3A4 5T7 5'  |                   |                        |   |
|          | 354 373 4T7 446 3DU   |                   |                        |   |
|          | 354 373 4T7 446 467   |                   |                        |   |
|          | CK 29 35 0924 1508 B  | T (Repeats        | s message – 1157z)     |   |
|          | R MSG GA  |                   |                        |   |
|          | CK 22 35 0924 1600 B  |                   |                        |   |
|          | 3U6 3A4 TTA TTU T   |                   |                        |   |
|          | 445 TTA TTU 773 46  | 6 4D6 365 N54     | (1202.)                |   |
|          | AR MSG AGN  | T (D              | (1202z)                |   |
|          | C <b>K 22 35 0924 1600 B</b><br>R MSG GA                              | 1 (Repea          | ats message – 1103z)   |   |
|          | СМЗО ОА<br>К 141 35 0924 1626 В                                       | т                 |                        |   |
|          | 4 3U6 3A4 TTU 773 3   | -                 | (Cont'd – 1206z)       |   |
| 01010    | + 500 511+ 110 775 5.   | 34 373 417 440    | (Cont d 12002)         |   |
| M95      | 4243//9054kHz   | 1143 (IP) - 1200z | 30 September 2021      |   |
|          |   |                   | -                      |   |
|          | ss Chinese digital 4+4<br>to CW - Handsent 11                         |                   | B 1143z                |   |
| HR MSG   | MSG TO YR PSE CY<br>TO YR PSE CY (115                                 |                   | (1150z                 | ) |
|          | C <b>K 45 35 0930 1510 B</b><br>T T3T 3U6 3A4 5T7 5'<br>GN            |                   | 354 (Cont'd – 1153z)   |   |
|          | CK 35 35 0930 1510 B  | T (Renea          | ats message – 1155z)   |   |
|          | R MSG GA  | - (repe           |                        |   |
|          | K 147 35 0930 1610 B  | T                 |                        |   |
|          |   |                   | 3 NAT (Cont'd – 1200z) |   |
|          |   |                   | C ( IDI                |   |

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4364//8073kHz 1130 - 1139z 03 September 2021
BNGC DE XSV85
Into voice USB 1130z Chinese Female 1130z
Switched to Chinese digital 4+4 QPSK 75/3000 LSB 1131z
Switched to CW – Handsent – 1137z
 BNGC (x3) DE XSV85 (x2)
                                                                         (Cont'd - 1137z)
HR MSG GA PSE CY
NR 0713 CK 176 35 0903 1558 BT
TT3 3U6 3AN 3U7 TAU 773 TA7 773 TAD 773
TAN 773 TU4 773 356 4AD NN3
                                                                                         (1138z)
(1138z)
                                                                          (Cont'd - 1139z)
                      4364//8073kHz 1131 (IP) - 1145z 12 October 2021
M95
 BNGC DE XSV85
In progress In Chinese digital 4+4 QPSK 75/3000 LSB 1131z
Switched to CW – Handsent 1141z
 V BNGC (x3) DE XSV85 (x2) ((1141z)
HR 7GS GA PSE CY (1142z)
NR 0762 CK 272 35 0912 1636 BT
TAU 3U6 3AN 3U7 TAU 773 357 374 4AA NN3 (Cont'd – 1145z)
                       4364//8073kHz 1131 (IP) - 1145z 12 October 2021
BNGC DE XSV85
Into voice USB Chinese Male 1130z
Switched to Chinese digital 4+4 QPSK 75/3000 LSB 1131z
Switched to CW Handsent 1137z
V BNGC (x3) DE XSV85 (x12)
HR 7GS GA PSE CY
NR 08. CK 214 35 0934 1539 BT
TU4 3U6 3AN 3U7 TAU 773 TU4 773 TU5 773 356 (Cont'd – 1140z)
                                                                                                                  (1137z)
(1138z)
                                                                                                                   Courtesy JPL
```

Courtesy JPL

## Marker Beacons (MX MXI)

|   |        | •      | •                                       |              |                                  |                            |         |      |
|---|--------|--------|---|--------------|----------------------------------|----------------------------|---------|------|
| 3657                                    | 0130z  | 30 Sep | MX CW                                   | Beacon "V"   | Khiya                            | Weak                       | BR      | THU  |
| 3037                                    | 01302  | эо вер | MIZE CW                                 | Beacon v     | Kiiiva                           | Weak                       | DIC     | 1110 |
| 4557.7                                  | 1655z  | 24 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | XAH     | FRI  |
| 4337.7                                  | 0120z  | 30 Sep |   | Beacon "D"   | Sevastopol                       |                            | BR      | THU  |
| 4557.0                                  |        |        |   |              |                                  |                            |         |      |
| 4557.9                                  | 2202z  | 30 Sep | MAI CW                                  | Beacon "S"   | Severomorsk                      |                            | BR      | THU  |
| 5152.0                                  | 0045   | 22.5   | MVI CW                                  | , D   D      | 77 1' ' 1                        |                            | 37 4 11 | TILL |
| 5153.8                                  | 0845z  | 23 Sep |   | Beacon "P"   | Kaliningrad                      |                            | XAH     | THU  |
| 5154.1                                  | 1526z  | 20 Sep |   | Beacon "A"   | Astrakhan                        |                            | BR      | MON  |
|   | 1655z  | 24 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | XAH     | FRI  |
|   |        |        |   |              |                                  |                            |         |      |
| 5156.8                                  | 1609z  | 10 Sep | MX CW                                   | Beacon "L"   | St Petersburg                    |                            | BR      | FRI  |
|   |        |        |   |              |                                  |                            |         |      |
| 5342.1                                  | 1202z  | 25 Sep | MXV CW                                  | Beacon "V"   |                                  | (Fair via SDR Novosibirsk) | E.SMITH | SAT  |
|   | 0912z  | 27 Sep |   | Beacon "V"   |                                  | (Weak via SDR Novosibirsk) | E.SMITH | MON  |
|   | 1137z  | 28 Sep | MXV CW                                  | Beacon "V"   |                                  | (Fair via SDR Novosibirsk) | E.SMITH | TUE  |
|   |        | •      |   |              |                                  | · ·                        |         |      |
| 7508.7                                  | 1145z  | 14 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | BR      | TUE  |
|   | 0845z  | 23 Sep |   | Beacon "D"   |                                  |                            | XAH     | THU  |
|   | 1655z  | 24 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | XAH     | FRI  |
| 7508.8                                  | 1630z  | 20 Sep |   |              | Kaliningrad                      |                            | BR      | MON  |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 0845z  | 23 Sep |   | Beacon "P"   |                                  |                            | XAH     | THU  |
| 7508.9                                  | 1145z  | 14 Sep | MVI CW                                  | Beacon "S"   | Cavaramarak                      |                            | BR      | TUE  |
| 1300.9                                  |        |        |   | Beacon "S"   |                                  |                            |         |      |
|   | 0845z  | 23 Sep |   |              |                                  |                            | XAH     | THU  |
| <b>5500</b> 4                           | 1655z  | 24 Sep |   | Beacon "S"   |                                  |                            | XAH     | FRI  |
| 7509.1                                  | 1605z  | 10 Sep |   | Beacon "A"   |                                  |                            | BR      | FRI  |
|   | 1655z  | 24 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | BR      | FRI  |
|   |        |        |   |              |                                  |                            |         |      |
| 7714                                    | 1212z  | 25 Sep | MXV CW                                  |              |                                  | (Good via SDR Novosibirsk) | E.SMITH | SAT  |
|   | 0913z  | 27 Sep | MXV CW                                  |              |                                  | (Good via SDR Novosibirsk) | E.SMITH | MON  |
|   | 1137z  | 28 Sep | MXV CW                                  | Beacon "V"   |                                  | (Good via SDR Novosibirsk) | E.SMITH | TUE  |
|   |        |        |   |              |                                  |                            |         |      |
| 8494.8                                  | 1604z  | 10 Sep |   | V Beacon "P" |                                  |                            | BR      | FRI  |
| 8494.9                                  | 1144z  | 01 Jan | MXI CW                                  |              |                                  |                            | AB      | TUE  |
| 8495.1                                  | 0143z  | 30 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | BR      | THU  |
|   |        |        |   |              |                                  |                            |         |      |
| 8497.8                                  | 1603z  | 10 Sep | MX CW                                   | Beacon "L"   | St Petersburg                    |                            | BR      | FRI  |
|   | 0845z  | 23 Sep | MX CW                                   | Beacon "L"   | St Petersburg                    |                            | XAH     | THU  |
|   | 1655z  | 24 Sep | MX CW                                   | Beacon "L"   | St Petersburg                    |                            | XAH     | FRI  |
|   |        |        |   |              |                                  |                            |         |      |
| 10871.7                                 | 1601z  | 10 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | BR      | FRI  |
|   | 1655z  | 24 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | XAH     | FRI  |
| 10871.8                                 | 0845z  | 23 Sep | MXI CW                                  | Beacon "P"   | Kaliningrad                      |                            | XAH     | THU  |
| 10871.9                                 | 1601z  | 02 Oct | MXI CW                                  | Beacon "S"   | Severomorsk                      |                            | BR      | FRI  |
|   | 0845z  | 23 Sep |   | Beacon "S"   | Severomorsk                      |                            | XAH     | THU  |
|   |        | J•p    | 011                                     |              | == ============================= |                            |         |      |
| 10872.1                                 | 1600z  | 10 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | BR      | FRI  |
|   | 0147z  | 30 Sep |   | Beacon "A"   |                                  |                            | BR      | THU  |
|   | O. III | эо эср | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Doucon A     | . ACCIONIUM                      |                            | 211     | 1110 |
| 13527.7                                 | 1557z  | 10 Sep | MXI CW                                  | Beacon "D"   | Sevastopol                       |                            | BR      | FRI  |
| 1.1201.1                                | 0845z  | 23 Sep |   | Beacon "D"   | Sevastopol                       |                            | XAH     | THU  |
|   |        |        |   | Beacon "D"   | *                                |                            | XAH     | FRI  |
| 12527.0                                 | 1655z  | 24 Sep |   |              | Sevastopol                       |                            |         |      |
| 13527.9                                 | 1637z  | 13 Oct |   | Beacon "S"   | Severomorsk                      |                            | BR      | WED  |
| 13528                                   | 1557z  | 10 Sep |   | Beacon "C"   | Moscow                           |                            | BR      | FRI  |
|   | 0845z  | 23 Sep |   | Beacon "C"   | Moscow                           |                            | XAH     | THU  |
|   | 1655z  | 24 Sep |   | Beacon "C"   | Moscow                           |                            | XAH     | THU  |
| 13528.1                                 | 1559z  | 10 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | BR      | FRI  |
|   |        |        |   |              |                                  |                            |         |      |
| 16331.7                                 | 1133z  | 14 Sep |   | Beacon "D"   | Sevastopol                       |                            | BR      | TUE  |
|   | 0845z  | 23 Sep |   | Beacon "D"   | Sevastopol                       |                            | XAH     | THU  |
| 16331.9                                 | 1131z  | 14 Sep | MXI CW                                  | Beacon "S"   | Severomorsk                      |                            | BR      | TUE  |
| 16332.1                                 | 1140z  | 14 Sep | MXI CW                                  | Beacon "A"   | Astrakhan                        |                            | BR      | TUE  |
|   |        |        |   |              |                                  |                            |         |      |
| 20046                                   | 0845z  | 23 Sep | MX CW                                   | Beacon "A"   | Astrakhan                        |                            | XAH     | THU  |
|   |        | -      |   |              |                                  |                            |         |      |

#### **Unidentified Beacon**

 $And r\dot{e}, (F5JBR), reports \ this \ beacon \ active \ on \ two \ frequencies - Any \ information \ welcome;$ 

| 4916       | 1311z | V91H | 10 Sep | V91H: UNID CW Beacon: Send only V91H   | (Via SDR Finland) | F5JBR | FRI |
|------------|-------|------|--------|--|-------------------|-------|-----|
| 7374       | 0645z | V91H | 11 Sep | V91H : UNID CW Beacon : Send only V91H | (Via SDR Finland) | F5JBR | SAT |
| 4916//7374 | 0730z | V91H | 11 Sep | V91H: UNID CW Beacon: Send only V91H   | (Via SDR Finland) | F5JBR | SAT |

#### **Oddities**

#### **Continuous Tones (From PoSW)**

Casual tuning around the short-wave bands often reveals a transmission with just a fixed audio tone which will be on for several hours and quite often after it has gone off there will be an "XJT" noise-maker centred on the same spot on the dial which suggests some kind of connection although there is such a thing as coincidence:-

6-Sept-21, Monday:- 0821 UTC, 8033 kHz, strong signal, modulated by audio tone, steady enough to give a stable reading on my ancient frequency counter connected to the low-level audio output on the receiver which showed 605- 606 Hz. A tone of this same frequency had also been noted on 6414 kHz on 23-August. Was on throughout the day, still there at 1825z. Not there on the following morning when checked at around 0600z but there was a very strong "XJT" on 1325z

29-Oct-21, Friday: - 0643 UTC, 8140 kHz, steady audio tone, frequency counter said 1 kHz, signal strength up and down, still on at 1410 UTC. Not there on the following morning when checked at 0825z but there was a strong "XJT" in residence.

#### XC 'The Crackle'

Quite a rare catch these days, but still occasionally active, 'The Crackle' was found on Saturday, 25 September, in progress, on 5569kHz at 1430z with a fair signal on Twente. A quick scan round some online SDRs found the strongest signal, about S7 on a Swedish SDR.

'The Crackle' is a strange signal & it's not clear if this is an intelligent signal - sending some form of communication or just a spurious artefact. The signal ceased abruptly at 1550z.

| 5569                | 1430  (IP) - 1550z                               | 25 Sep   | XC  | 'The Crackle' A good S5 into S.E. UK. Found to be   | S7 via Swed                 | ish SDR           | BR   | SAT                                    |
|---------------------|--|--|---|---|-----------------------------|-------------------|--|--|
| 3510<br>3510        | <u>'The Air Horn'</u><br>0127z<br>0353z<br>1855z | 30 Sep<br>18 Oct<br>27 Oct                               | Normal :                                      | signal (Air Horn)<br>sound with minor QSB 0354z<br>Horn sounds loud and clear   | Strong<br>Good<br>Excellent | USB<br>USB        | BR<br>chpa<br>chpa                         | THU<br>MON<br>WED                      |
| 4310<br>4310        | <u>'The Goose'</u><br>1547z<br>1513z             | 11 Oct<br>13 Oct   |   | sound from the Goose<br>sound from the Goose  | Excellent<br>Excellent      |                   | chpa<br>chpa                               | MON<br>MON                             |
| 3243<br>3243        | <u>'The Goose'</u><br>0355z<br>1853z             | 18 Oct<br>27 Oct   | The Goo                                       | ose. Normal sound from the Goose se sounds with QSB and minor QRM   | Moderate<br>Weak            | USB               | chpa<br>chpa                               | MON<br>WED                             |
| <b>4770</b><br>4770 | 'The Alarm'<br>1616z<br>0401z<br>1900z           | 13 Oct<br>18 Oct<br>27 Oct                               |   | rm is on<br>sound from the Alarm<br>rm sounds loud and clear  | Good<br>Moderate<br>Good    | USB<br>USB<br>USB | chpa<br>chpa<br>chpa                       | MON<br>MON<br>WED                      |
| <u>\$28</u><br>4625 | 'The Buzzer' 2325z 0148z 1548z 1512z 0400z 1859z | 06 Sep<br>30 Sep<br>11 Oct<br>13 Oct<br>18 Oct<br>27 Oct | S28<br>S28<br>S28<br>S28<br>S28<br>S28<br>S28 | 'The Buzzer' Signal is a rising/falling note, which is a 'The Buzzer' Back to sending the 'normal' single, mo Normal sound from the Buzzer Normal sound from the Buzzer Normal sound from the Buzzer with minor QSB The Buzzer buzzes loud and clear with minor QRM |                             | USB               | Gary<br>BR<br>chpa<br>chpa<br>chpa<br>chpa | MON<br>THU<br>MON<br>MON<br>MON<br>WED |

Ary,(AB), reports pirate stations are bugging the Buzzer on 4625 kHz, 05 October. A countdown in German is transmitted and other stations send music. Unreadable voices in the background. The buzzer is buzzing as always.

| <u>S30</u> | 'The Pip'                                 |  |                                 |  |                                |                          |                                    |                                 |
|------------|---|--|---------------------------------|--|--------------------------------|--------------------------|------------------------------------|---------------------------------|
| 3756       | 0132z<br>1543z<br>0357z<br>1857z          | 30 Sep<br>11 Oct<br>18 Oct<br>27 Oct           | S30<br>S30<br>S30<br>S30        | 'Pip' marker (Night freq) USB<br>Normal pip sound with lots of QRM from HAMs<br>Normal pip sound with some QSB<br>The Pip sounds loud and clear  | Moderate<br>Weak<br>Excellent  | USB                      | BR<br>chpa<br>chpa<br>chpa         | THU<br>MON<br>MON<br>WED        |
| 5448       | 1526z                                     | 13 Oct   | S30                             | 'Pip marker (Day freq) Normal pip sound with QRM   | Moderate                       | USB                      | chpa                               | MON                             |
| <u>S32</u> | 'Squeaky Wheel'                           |  |                                 |  |                                |                          |                                    |                                 |
| 3828       | 0151z<br>1550z<br>1515z<br>0358z<br>1858z | 30 Sep<br>11 Oct<br>13 Oct<br>18 Oct<br>27 Oct | S32<br>S32<br>S32<br>S32<br>S32 | 'Squeaky Wheel' marker (Night freq) The weak Squeaky Wheel is heard Squeaky Wheel is heard, minor QRM Normal sound from the Squeaky Wheel with QSB The Squeaky Wheel sounds loud and clear | Weak<br>Weak<br>V.weak<br>Good | USB<br>USB<br>USB<br>USB | BR<br>chpa<br>chpa<br>chpa<br>chpa | THU<br>MON<br>MON<br>MON<br>WED |

Contributors: AB, BR, chpa, ER, E.SMITH, F5JBR, Gary, Gert, HFD, Jochen\_Kopf, PoSW, RNGB, XAH Thank you all for your logs.

# **Voice Number Stations**

# E06 Sept/Oct log:

Monday 0210z 11528kHz 0310z 14613kHz

25/10 '537' 280 49 64000......etc (via KiwiSDR RUS) Thanks HfD

Thursday (repeats Friday) 0300z 13557kHz 0400z khz

09/09 '36'1 429 35 12096.....etc (via Russian KiwiSDR) Thanks HfD

First /Third Thursday (repeats Friday) 0500z 14370kHz 0600z 16265kHz

02/09 '354' 982 61 38858 58020 91183 37651 67607 02286 09165 81040 03046 27297 50175 50146 90210 78232 15087 99197 24641 29738 36860 66709 42435 54957 19483 38900 81111 48581 46919 63213 90949 02322 54278 72872 01519 56279 78361 08407 73058 74617 29803 47089 87415 18994 53379 76222 58223 18184 72869 71204 64994 57334 25065 64327 40841 35275 46112 15227 68485 63350 56369 18933

64263 982 61 00000

 $16/09 \qquad `354' \ 197 \ 60 \ 25727 \ 71983 \ 10520 \ 57412 \ 83072 \ 50254 \ 37241 \ 87625 \ 42233 \ 80765 \ 86272 \ 29918 \ 13090 \ 00683 \ 57289 \ 58461 \ 04648 \ 10382 \ 03899 \ 74960$ 

 $68758\ 60792\ 14128\ 61419\ 99794\ 20533\ 89834\ 95956\ 07473\ 08768\ 54738\ 11691\ 05006\ 04717\ 45742\ 72116\ 79773\ 69774\ 67250\ 61438\ 38707\ 43154\ 13159\ 13271\ 45558\ 97011\ 86208\ 26161\ 92257\ 61971\ 69392\ 39364\ 71542\ 59013\ 29098\ 67309\ 43033\ 98627\ 54674\ 16196$ 

197 60 00000

0600z 18425kHz 0700z 20230kHz

 $07/10 \qquad {}^{\prime}186^{\prime}\ 392\ 50\ 98727\ 00978\ 43490\ 78541\ 10690\ 54577\ 16272\ 76090\ 57226\ 24712\ 54117\ 00694\ 54685\ 72011\ 29589\ 67751\ 12592\ 45240\ 67245\ 78743\\ 06780\ 40737\ 09603\ 25326\ 65915\ 28757\ 17568\ 35247\ 19825\ 88881\ 16278\ 45313\ 83088\ 21714\ 22300\ 81097\ 72313\ 29023\ 13100\ 48070$ 

80546 79529 24743 63841 57246 02533 88754 86210 67260 76548 392 50 00000

 $21/10 \qquad {}^{\prime}186^{\prime}\ 407\ 52\ 65092\ 79694\ 92360\ 58972\ 58469\ 63275\ 24506\ 44709\ 81245\ 92821\ 76639\ 57762\ 60293\ 16246\ 31072\ 98431\ 15637\ 03298\ 54699\ 66891\\ 52243\ 68267\ 56245\ 68167\ 76643\ 31840\ 39309\ 96110\ 12571\ 58056\ 30901\ 94822\ 00817\ 27299\ 90147\ 20949\ 04665\ 31265\ 26866\ 55298$ 

61722 00834 84692 37207 49512 02794 68437 20103 57023 66345 72925 64201 407 52 00000

Other: 0900z 11123kHz 0930z 13532kHz

 $16/10 \qquad \ \ \, (980'\ 764\ 31\ 32911\ 85927\ 51038\ 48901\ 85738\ 62349\ 06571\ 53751\ 46224\ 47416\ 52428\ 22271\ 68090\ 68608\ 95318\ 09560\ 09620\ 06274\ 56687\ 96348$ 

17020 79220 44411 66238 04375 13213 39051 55700 97361 28322 74335 764 31 00000 Thanks Ary

1400z 10189kHz (very slow and different voice) Thanks Ary

26/10 '192' 857 39 04576 79534 91786 22778 63643 08652 17888 13974 13582 80797 54061 87986 28972 82326 74341 01297 98732 65421 52607 63124 43054 76531 23517 33834 74192 04042 39625 04303 62027 49881 48136 73424 90364 54727 35725 65953 14884 31528 14858

857 39 00000

### **E07**

Before we move on to others' logs we start, as ever in this section, with PoSW's logs and analysis:

Sunday + Wednesday Schedule, 1700 UTC Start:-

5-Sept-21, Sunday:- 1700 UTC, 12139 kHz, "161 161 161 000", strong signal.

1720 UTC, 10639 kHz, much weaker.

 $8\text{-Sept-21, Wednesday:-}\ 1700\ \mathrm{UTC},\ 12139\ \mathrm{kHz},\ "161\ 161\ 161\ 000",\ \mathrm{strong}.$ 

1720 UTC, 10369 kHz, very weak.

12-Sept-21, Sunday:- 1700 UTC, 12139 kHz, "161 161 161 000", strong signal.

1720 UTC, 10639 kHz, nothing heard, too weak to copy, must have been buried in the local interference.

15-Sept-21, Wednesday:- 1700 UTC, 12139 kHz, full message, "161 161 161 17", DK/GC "9767 50" x 2, strong signal.

1720 UTC, 10639 kHz, very weak, unreadable at first, became a bit stronger after 1724z.

1740 UTC, 9139 kHz, third sending back up to being strong, peaking well over S9.

22-Sept-21, Wednesday:- 1700 UTC, 12139 kHz, good signal and 1720 UTC, 10639 kHz,

weak, "161 161 161 000".

26-Sept-21, Sunday:- 1700 UTC, 12139 kHz, strong signal, "161 161 161 000".

1720 UTC, 10639 kHz, weak.

3-Oct-21, Sunday:- 1700 UTC, 11156 kHz, "130 130 130 1" for a full message, very weak, sank into noise, unreadable.

1720 UTC, 9356 kHz, much stronger, S9, DK/GC "474 61" x 2.

1740 UTC, 8056 kHz, also strong, well over S9.

6-Oct-21, Wednesday:- 1700 UTC, 11156 kHz, "130 130 130 000", S8.

1720 UTC, 9356 kHz, weaker.

10-Oct-21, Sunday:- 1700 UTC, 11156 kHz, "130 130 130 000", weak.

1720 UTC, 9356 kHz, much stronger, peaking over S9.

13-Oct-21, Wednesday:-  $1700\,\mathrm{UTC}$ ,  $11156\,\mathrm{kHz}$ , full message mode, "130–130–130–130, DK/GC "3999–78" x 2, strong signal. 1720 UTC, 9356 kHz, weaker.

1740 UTC, 8056 kHz, back up to a strong signal.

17-Oct-21, Sunday:- 1700 UTC, 11156 kHz, "130" and "3999 78" again, peaking S8 with deep QSB.

1720 UTC, 9356 kHz, weaker, S4 to S5.

1740 UTC, 8056 kHz, stronger, S8.

24-Oct-21, Sunday:- 1700 UTC, 11156 kHz, "130" and still "3999 78", S7.

1720 UTC, 9356 kHz, weaker. 1740 UTC, 8056 kHz, stronger, over \$9.

27-Oct-21, Wednesday:- 1700 UTC, 11156 kHz, "130 130 130 000", S9.

1720 UTC, 9356 kHz, weaker.

#### Saturday Schedule, 1300 UTC Start:-

4-Sept-21:- 1300 UTC, 12176 kHz, "114 114 114 000", good signal.

1320 UTC, 11576 kHz, weaker.

11-Sept-21:- 1300 UTC, 12176 kHz, a full message, somewhat unusual for this schedule, "152 152 152 17", DK/GC "889 41" x 2, strong signal.

1320 UTC, 11576 kHz, weaker, S5 to S6. 1340 UTC, 10276 kHz, also S5 to S6.

18-Sept-21:- 1300 UTC, 12176 kHz, "152 152 152 000", strong signal.

1320 UTC, 11576 kHz, weaker.

25-Sept-21:- Another full message, missed the 1300z sending:-

1320 UTC, 11576 kHz, "152 152 152 1", DK/GC "765 43" x 2, strong.

1340 UTC, 10276 kHz, peaking S8 with QSB.

2-Oct-21:- Missed the first sending again, getting to be a habit!

1320 UTC, 11576 kHz, "152 152 152 000", peaking well over S9.

9-Oct-21:- 1300 UTC, 12176 kHz, "152 152 152 000", strong.

1320 UTC, 11576 kHz, slightly weaker.

23-Oct-21:- 1300 UTC, 12176 kHz, "152 152 152 1", DK/GC "895 178" x 2, long message,

the longest from any E07 for some time, total transmission time just over twenty minutes.

S9 signal.

1325:15s approx, 11576 kHz, running late, good signal, S8.

1350:30s UTC, 10276 kHz, S7 to S8.

30-Oct-21:- 1300 UTC, 12176 kHz, "152" and "895 178" again, very strong S9+ signal.

1325 UTC, after, 11576 kHz, S9.

1350:30s UTC, 10276 kHz, S8.

#### Sunday Schedule, 0600 UTC Start:-

5-Sept-21:- 0600 UTC, 9261 kHz, "224 224 224 000", S7.

0620 UTC, 10261 kHz, weaker.

12-Sept-21:-0600 UTC, 9261 kHz, as expected a full message since this schedule is a repeat of that heard on the previous day starting at 1300z. "224

224 224 1", DK/GC "889 41" x 2, peaking S8.

0620 UTC, 10261 kHz, S6 to S7.

0640 UTC, 11461 kHz, S7 with QSB.

19-Sept-21:- 0600 UTC, 9261 kHz, "224 224 224 000", over S9.

0620 UTC, 10261 kHz, weaker.

26-Sept-21:- 0600 UTC, 9261 kHz, "224 224 224 1", DK/GC as per yesterday's 1300z sending, "765 43" x 2, S8.

0620 UTC, 10261 kHz, S5 to S6.

0640 UTC, 11461 kHz, back up to a strong signal, over S9.

3-Oct-21:- 0600 UTC, 10317 kHz, "312 312 312 000", weak signal.

0620 UTC, 11117 kHz, stronger.

10-Oct-21:- 0600 UTC, 10317 kHz and 0620 UTC, 11117 kHz, both weak, "312 312 312 000".

17-Oct-21:- 0600 UTC, 10317 kHz, "312 312 312 000", good signal around S8.

0620 UTC, 11117 kHz, S8 to S9.

24-Oct-21:- 0600 UTC, 10317 kHz, "312 312 312 1", DK/GC as expected, "895 178" x 2, weak signal at first, became stronger by 1305z.

0625:15s UTC, 11117 kHz, S5 to S6.

0650:30s UTC, 12217 kHz, strong, over S9.

### Others' Logs:

#### Sunday

#### September 2021

| 0600z | 9261kHz | 0620z                | 10261kHz      | 0640z | 11461kHz |                         |
|-------|---------|----------------------|---------------|-------|----------|-------------------------|
| 05/09 | 2       | 224 000              |               |       |          | 0600z Strong 0620z Fair |
| 12/09 | 2       | 224 1 889 41 71888 . | 35451 000 000 |       |          | V.strong [XAH]          |
| 26/09 | 2       | 224 1 765 43 49125 . | 59003 000 000 |       |          | Strong                  |

#### Sunday/Wednesday

### September 2021

| 1700z  | 12139kHz   | 1720z            | 10639kHz        | 1740z | 9139kHz |                    |            |
|--|--|------------------|-----------------|-------|---------|--------------------|------------|
| 01/09  | 161  | 000              |                 |       |         | [1720z QRM2]       | Fair       |
| 05/09  | 161  | 000              |                 |       |         |                    | Fair       |
| 08/09  | 161  | 000              |                 |       |         | [1720z QRN2]       | Fair       |
| 12/09  | 161  | 000              |                 |       |         | 1700z Fair, 1720z  | . Weak     |
| 15/09  | 161  | 1 9767 50 46052  | 2 28645 000 000 |       |         | [1720z Weak]       | Fair       |
| 95192 3465<br>16471 0709<br>24605 9680<br>02685 9231<br>73128 6761<br>79047 8473<br>19472 6952<br>97223 3544 | 1 1<br>18 65828 73000 75953<br>15 05573 39649 89153<br>19 44899 91707 14000<br>31 40056 90680 02472<br>7 78636 85072 60169<br>1 23795 60812 29087<br>15 69822 34179 90362<br>17 26713 21610 36250<br>3 66504 07246 72553<br>36 64102 78575 28645<br>Courtesy XAH |                  |                 |       |         |                    |            |
| 19/09  | 161  | 1 9767 50 46052  | 2 28645 000 000 |       |         | [1720z Unworkable] | Weak, QRM3 |
| 22/09  | 161  | 000              |                 |       |         | 1700z Strong, 1720 | )z Weak    |
| 26/09  | 161  | 000              |                 |       |         |                    | Strong     |
| 29/09  | 161  | 1 474 61 99666 . | 82102 000 000   |       |         |                    | Fair, QRM3 |

#### October 2021

| 1700z | 11156kHz | 1720z         | 9356kHz       | 1740z | 8056kHz |                       |                   |           |
|-------|----------|---------------|---------------|-------|---------|-----------------------|-------------------|-----------|
| 04/10 | 130 1 4  | 474 61 99666  | 82102 000 000 |       |         | [1700z Weak, 1740z TT | YQRM2]            | Strong    |
| 06/10 | 130 00   | 0             |               |       |         |                       |                   | Fair QRM3 |
| 10/10 | 130 00   | 0             |               |       |         |                       |                   | Fair      |
| 13/10 | 130 1 3  | 3999 78 20970 | 31866 000 000 |       |         |                       |                   | Strong    |
| 18/10 | 130 1 3  | 3999 78 20970 | 31866 000 000 |       |         | [1740z Strong QRM3]   |                   | Fair QRM3 |
| 20/10 | 130 1 3  | 3999 78 20970 | 31866 000 000 |       |         | [1740z Fair]          |                   | Weak      |
| 24/10 | 130 1 3  | 3999 78 20970 | 31866 000 000 |       |         | [1720z Weak QRM2]     |                   | Fair      |
| 27/10 | 130 00   | 0             |               |       |         |                       | 1700z Fair, 1720z | Weak      |
| 31/10 | 130 00   | 0             |               |       |         |                       |                   | Weak      |

#### Monday/Wednesday

#### September 2021

1900z 14584kHz 1920z 13384kHz 1940z 11584kHz

NRH throughout September schedule

#### October 2021

1900z 11359kHz 1920z 10139kHz 1940z 9139kHz

04/10 NRH

06/10 NRH 1920z slot: 1921z, 1928 and 1929z a series of tones heard with some variation in frequency. Those at 1928 to 1929z much stronger;

See below



#### Tuesday/Friday

#### September 2021

| 0700z            | 16354kHz               | 0720z      | 18664kHz               | 0740z      | 19354kHz               |                        |
|------------------|------------------------|------------|------------------------|------------|------------------------|------------------------|
| 07/09            | 363 000                |            |                        |            |                        | Weak, Dutch SDR        |
| 14/09            | 363 000                |            |                        |            |                        | Weak, DutchSDR         |
| 21/09            | 363 000                |            |                        |            | [0720z Weak Dutch SDR] | Fair                   |
| 24/09<br>October | 363 000<br><b>2021</b> |            |                        |            |                        | 0700z Fair, 0720z Weak |
| 0700z            | 15962kHz               | 0720z      | 17462kHz               | 0740z      | 18542kHz               |                        |
| 05/10            | 945 1 19               | 87 102 638 | 67 92026 000 000       |            | [0740z Dutch SDR]      | Weak                   |
| 08/10            | 945 1 19               | 87 102 638 | 67 92026 <b>ATTENT</b> | TION [sing | le repeat]             | Weak                   |
| 12/10            | 945 000                |            |                        |            |                        | Weak FinnishSDR        |
| 19/10            | 945 000                |            |                        |            |                        | Weak Dutch SDR         |
| 22/10            | 945 000                |            |                        |            |                        | Weak                   |
| 26/10            | 945 1 62               | 16 87 4878 | 0 86114 000 000        |            | [0700z Strong]         | Weak                   |
| 29/10            | 945 1 62               | 16 87 4878 | 0 86114 000 000        |            |                        | Weak                   |

#### Thursday/Saturday

#### September 2021

| 1410z | 16228kHz    | 1430z      | 15928kHz      | 1450z | kHz |                         |                   |
|-------|-------------|------------|---------------|-------|-----|-------------------------|-------------------|
| 02/09 | 594 1 319 8 | 37 34714 . | 23994 000 000 |       |     | [1410/1430z Unworkable] | Strong            |
| 04/09 | 594 1 319 8 | 37 34714 . | 23994 000 000 |       |     | 1410z Fair, 1430z Wea   | ak, 1450z S9 QSB5 |
| 09/09 | 594 000     |            |               |       |     |                         | Weak              |
| 11/09 | 594 000     |            |               |       |     | [1410z Dutch SDR]       | Weak              |
| 23/09 | 594 000     |            |               |       |     |                         | Weak              |
| 25/09 | 594 000     |            |               |       |     |                         | Weak              |
| 30/09 | 594 1 6548  | 64 69004   | 92966 000 000 |       |     | [1450z Strong]          | Weak              |

#### October 2021

| 1410z | 15849kHz | 1430z       | 14849kHz      | 1450z | 13449kHz |              |        |
|-------|----------|-------------|---------------|-------|----------|--------------|--------|
| 07/10 | 746 1 29 | 4 64 98215. | 49671 000 000 |       |          |              | Weak   |
| 09/10 | 746 1 29 | 4 64 98215. | 49671 000 000 |       |          | [0740z QRM]  | Weak   |
| 14/10 | 746 1 29 | 4 64 98215  | 49671 000 000 |       |          | [1450z Weak] | Strong |
| 16/10 | 746 1 29 | 4 64 98215. | 49671 000 000 |       |          |              | Weak   |
| 21/10 | 746 000  |             |               |       |          |              | Weak   |
| 23/10 | 746 000  |             |               |       |          |              | Weak   |
| 28/10 | 746 000  |             |               |       |          |              | Weak   |
| 30/10 | 746 000  |             |               |       |          |              | Fair   |

### Saturday

#### September 2021

| 1300z   | 12176kHz | z 1320z            | 11576kHz      | 1340z 10276kHz |              |                       |
|---------|----------|--------------------|---------------|----------------|--------------|-----------------------|
| 04/09   |          | 152 000            |               |                |              | Weak [Strong via XAH] |
| 11/09   |          | 152 1 889 41 71888 | 35451 000 000 |                | [1300z Fair] | Weak [Strong via XAH] |
| 25/09   |          | 152 1 765 43 49125 | 59003 000 000 |                |              | Strong                |
| October | 2021     |                    |               |                |              |                       |
| 09/10   |          | 152 000            |               |                | [1320z QRM2] | Strong                |
| 16/10   |          | 152 000            |               |                | [1320z QRM2] | Strong                |



Malahit SDR receiver at PLdn's QTH for 152 152 152 000 on 12176kHz 1200z 16/10/2021. [11576kHz 1220z was noisy but Noise Reducer, NR, handled extremely well]

| 23/10 | 152 1 895 178 09071 88843 000 000<br>Revised start times: 1325/1350z due to msg length of 20m |              | Weak        |
|-------|---|--------------|-------------|
| 30/10 | 152. 1 895 178 89071 88843 000 000  | [1325z Fair] | Very strong |

# **E07a**

#### We open with others' logs:

#### Wednesday

#### September 2021

| 2000z | 8144kHz | 2020z | 6944kHz | 2040z | 5744kHz |            |
|-------|---------|-------|---------|-------|---------|------------|
| 01/09 | 197 000 |       |         |       | Ve      | ery strong |
| 08/09 | 197 000 |       |         |       | Ve      | ery strong |
| 15/09 | 197 000 |       |         |       | Ve      | ery strong |
| 22/09 | 197 000 |       |         |       | Ve      | ery strong |
| 29/09 | 197 000 |       |         |       | Ve      | ery strong |

#### October 2021

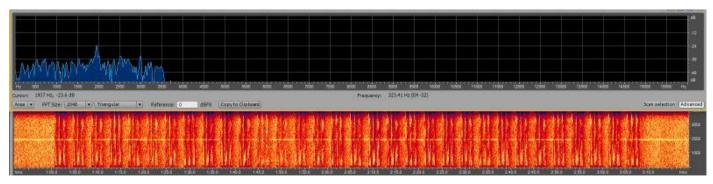
| 2000z  | 8144kHz   | 2020z  | 6944kHz   | 2040z     | 5744kHz |             |
|--|---|--|---|-----------|---------|-------------|
| 06/10  | 197 1 60  | 0300 7598 72   | 2 03533 4576  | 8 000 000 |         | Very strong |
| 13/10  | 197 1 60  | 0300 7598 72   | 2 03533 4576  | 8 000 000 |         | Very strong |
| 03170 5689<br>28599 1209<br>00502 4566<br>53313 7156<br>08615 2593 | 98 72<br>22 33700 03157 76522 64076<br>47 4565 40894 52886 51454<br>03 6324 53247 84057 90263<br>55 15982 25411 89847 80073<br>66 10370 09322 10865 48412<br>44 00139 19165 00460 99495<br>88 98064 18308 44137 94171 | 41955 98617 83<br>88306 56674 41<br>05842 94256 52<br>91231 32699 34<br>08157 06626 09<br>04511 27678 78 | 951 10068<br>691 79067<br>2565 01572<br>7797 12056<br>708 00996 |           |         |             |

20/10 197 000 27/10 197 000 Strong Strong

#### Thursday

#### September 2021

| 0430z | 6788kHz | 0450z | 7488kHz | 0510z | 8188kHz                         |             |
|-------|---------|-------|---------|-------|---------------------------------|-------------|
| 02/09 | 741 000 |       |         |       |                                 | Very strong |
| 09/09 | 741 000 |       |         |       |                                 | Very strong |
| 16/09 | 741 000 |       |         |       |                                 | Very strong |
| 23/09 | 741 000 |       |         |       |                                 | Strong QRM2 |
| 30/09 | 741 000 |       |         |       | [0450zHetQRM2, see image below] | Very strong |



E07a 0450z 30/09

1937Hz HETQRM2

'741 741 741 000'

| October  | 2021     |           |            |               |         |          |                         |                          |
|--|----------|-----------|------------|---------------|---------|----------|-------------------------|--------------------------|
| 0430z  | 6788kHz  |           | 0450z      | 7488kHz       | 0510z   | 8188kHz  |                         |                          |
| 07/10  |          | 741 1 603 | 300 7598 7 | 2 03533 45768 | 000 000 |          |                         | Strong QRM3              |
| 14/10  |          | 741 1 603 | 300 7598 7 | 2 03533 45768 | 000 000 |          | [0430zStrong QRN2]      | Weak QRN3                |
| 21/10  |          | 741 000   |            |               |         |          | [0450zHETQRM2 - 1921Hz] | Strong                   |
| 28/10  |          | 741 000   |            |               |         |          |                         | Strong QRM2              |
| Friday   |          |           |            |               |         |          |                         |                          |
| Septeml  | ber 2021 |           |            |               |         |          |                         |                          |
| 1510z  | 10583kHz | z         | 1530z      | 9383kHz       | 1550z   | 8183kHz  |                         |                          |
| 03/09  |          | 531 000   |            |               | М8 QTH  | : Weak   | [1510z V.weak]          | Strong, QRM2             |
| 24/09  |          | 531 000   |            |               |         |          |                         | 1510z Strong 1530z Fair  |
| October  | 2021     |           |            |               |         |          |                         |                          |
| 1510z  | 11424kHz | z.        | 1530z      | 10124kHz      | 1550z   | 9124kHz  |                         |                          |
| 01/10  |          | 411 000   |            |               |         |          |                         | Fair QRM3                |
| 08/10  |          | 411 1 128 | 325 593 64 | 91125 77538 0 | 00 000  |          |                         | Fair                     |
| 411 1 12825 593 64 91125 41648 40718 60981 34258 75603 90805 46041 74489 19324 24722 00671 25247 51825 86809 08376 78050 88328 74049 28681 11360 56363 15710 96781 97819 15480 68792 17659 79459 16264 85713 79618 74408 46724 91522 87787 16041 76244 56335 60360 82794 80754 42043 44890 92352 64019 41399 61927 21293 24389 13302 99637 68596 05056 58689 62672 01227 83330 79836 40379 60500 92931 31393 76397 77538 000 000 |          |           |            |               |         |          |                         |                          |
| 15/10  |          | 411 1 128 | 325 593 64 | 91125 77538 0 | 00 000  |          |                         | Strong                   |
| 22/10  |          | 411 000   |            |               |         |          |                         | 1510z Strong, 1530z Fair |
| 29/10  |          | 411 000   |            |               |         |          |                         | Fair QRM2                |
| Saturda  | y        |           |            |               |         |          |                         |                          |
| Septeml  | ber 2021 |           |            |               |         |          |                         |                          |
| 0800z  | 11153kHz | Z         | 0820z      | 12153kHz      | 0840z   | 13453kHz |                         |                          |
| 04/09  |          | 114 000   |            |               |         |          |                         | Weak                     |
| 11/00  |          | 114 000   |            |               |         |          |                         | Week                     |

| 0800z   | 11153kHz | 0820z      | 12153kHz          | 0840z | 13453kHz |                 |                     |
|---------|----------|------------|-------------------|-------|----------|-----------------|---------------------|
| 04/09   | 114 000  |            |                   |       |          |                 | Weak                |
| 11/09   | 114 000  |            |                   |       |          |                 | Weak                |
| 25/09   | 114 000  |            |                   |       |          | [0800z QRM4]    | Fair [Weak with M8] |
| October | 2021     |            |                   |       |          |                 |                     |
| 0800z   | 11484kHz | 0820z      | 12184kHz          | 0840z | 13384kHz |                 |                     |
| 09/10   | 413 1 12 | 825 593 64 | 91125 77538 000 0 | 000   |          | [0800z Weak]    | Fair                |
| 16/10   | 413 1 12 | 825 593 64 | 91125 77538 000 0 | 000   |          |                 | Weak                |
| 30/10   | 413 000  |            |                   |       |          | 0800z Fair 0820 | z Strong            |

### For this section PoSW offers his logs and analysis:

Wednesday Schedule, 2000 UTC Start:-

1-Sept-21:- 2000 UTC, 8144 kHz, "197 197 197 000", very strong signal.

2020 UTC, 6944 kHz, also very strong. As expected, moving to lower frequencies in September.

 $\hbox{8-Sept-21:-}\ 2000\ UTC,\ \hbox{8144 kHz},\ \hbox{``197}\ \ \hbox{197}\ \ \hbox{197}\ \ 000\hbox{''},\ very\ strong.$ 

2020 UTC, 6944 kHz, very strong.

15-Sept-21:- 2000 UTC, 8144 kHz and 2020 UTC, 6944 kHz, both S9+, "197 197 197 000".

29-Sept-21:- 2000 UTC, 8144 kHz, "197 197 197 000", very strong.

2020 UTC, 6944 kHz, also very strong.

6-Oct-21:- 2000 UTC, 8144 kHz, full message this evening, "197 197 197 1 60300, DK/GC "7598 72" x 2, very strong.

2020 UTC 6944 kHz, very strong.

2040 UTC, 5744 kHz, slightly weaker but still over S9.

20-Oct-21:- 2000 UTC, 8144 kHz and 2020 UTC, 6944 kHz, both strong - although not as strong as on most Wednesdays - "197 197 000".

27-Oct-21:- 2000 UTC, 8144 kHz and 2020 UTC, 6944 kHz, "197 197 197 000", both strong.

#### Friday Schedule, 1510 UTC Start:-

3-Sept-21:- 1510 UTC, 10583 kHz, "531 531 531 000", weak signal.

1530 UTC, 9383 kHz, much stronger, peaking well over S9.

10-Sept-21:- 1510 UTC, 10583 kHz, very weak, unreadable.

1530 UTC, 9383 kHz, weak but clear, "531 531 531 000".

17-Sept-21:- 1510 UTC, 10583 kHz, S6 and 1530 UTC, 9383 kHz, peaking S8, "531 531 531 000".

24-Sept-21:- 1510 UTC, 10583 kHz and 1530 UTC, 9383 kHz, both strong - unusually, "531 531 531 000".

1-Oct-21:- 1510 UTC, 11424 kHz, "411 411 411 000", peaking around S7.

1530 UTC, 10124 kHz, weak at first then came up to S6-S7.

8-Oct-21:-1510 UTC, 11424 kHz, "411 411 411 112825" for a full message. DK/GC "593 64" x 2, S5 to S6.

1530 UTC, 10124 kHz, stronger, S7 to S8.

1550 UTC, 8124 kHz, even stronger, well over S9.

15-Oct-21:-1510 UTC, 11424 kHz, "411...1...12825" and "593 45" for the second week in a row. Weak signal.

1530 UTC, 10124 kHz, stronger.

1550 UTC, 8124 kHz, strongest, over S9.

22-Oct-21:- 1510 UTC, 11424 kHz, "411 411 411 000", strong with QSB.

1530 UTC, 10124 kHz, weaker.

29-Oct-21:- 1510 UTC, 11424 kHz, S8 and 1530 UTC, 10124 kHz, weaker, "411 411 411 000".

### Saturday Schedule, 0800 UTC Start:-

4-Sept-21:- 0800 UTC, 11153 kHz, "114 114 114 000", very weak, only became readable just before 0802z.

0820 UTC, 12153 kHz, much stronger, S7 to S9.

11-Sept-21:- 0800 UTC, 11153 kHz, "114 114 114 000", weak signal.

0820 UTC, 12153 kHz, much stronger.

18-Sept-21:- 0800 UTC, 11153 kHz and 0820 UTC, 12153 kHz, both around S6, "114 114 114 000".

25-Sept-21:- 0800 UTC, 11153 kHz, weak signal and 0820 UTC, 12153 kHz, stronger, "114 114 114 000".

2-Oct-21:- 0800 UTC, 11484 kHz, "413 413 413 000", good signal, peaking around S8.

0820 UTC, 12184 kHz, strong, over S9.

9-Oct-21:- 0800 UTC, 11484 kHz, "413 413 413 1 12825", as expected the same message as heard on Friday the  $8^{th}$ , DK/GC "593 64" x 2. S5 to S6.

0820 UTC, 12184 kHz, also S5 to S6.

0840 UTC, 13384 kHz, weak.

23-Oct-21:- 0800 UTC, 11484 kHz, "413 413 413 000", S6 to S7.

0820 UTC, 12184 kHz, stronger.

30-Oct-21:- 0800 UTC, 11484 kHz and 0820 UTC, 12184 kHz, both good signals, 2413 413 413 000".

# E11 & E11a log Sept/Oct

| 4181kHz   | 1910z | 01/09 [392/00] Out 1913z S9  | Malc, HfD      | WED  |
|-----------|-------|--|----------------|------|
|           | 1910z | 04/09 [392/00] Out 1913z S9+10   | Malc           | SAT  |
|           | 1910z | 08/09 [396/00] Out 1913z S7  | Malc           | WED  |
|           | 1910z | 11/09 [393/00] Out 1913z S7  | Malc           | SAT  |
|           |       |  |                |      |
|           | 1910z | 15/09 [391/40 8198511975] Out 1916z S9   | Malc           | WED  |
|           | 1910z | 22/09 [395/00] Out 1913z S9  | Malc           | WED  |
|           | 1910z | 25/09 [392/00] Out 1913z S9  | Malc           | SAT  |
|           | 1910z | 29/09 [392/00] Out 1913z S7  | Malc           | WED  |
|           | 1910z | 06/10 [390/00] Out 1913z S9  | Malc           | WED  |
|           | 1910z | 09/10 [396/00] Out 1913z S7  | Malc           | SAT  |
|           | 1910z |  |                | WED  |
|           |       | 13/10 [396/37 57388 48091 0551451536] Out 1920z S7                               | Male, Brixmis  |      |
|           | 1910z | 16/10 [396/37 57388etc] Repeat of Wednesday                                      | Malc           | SAT  |
|           | 1910z | 20/10 [390/00] Out 1913z S9  | Malc, Brixmis  | WED  |
|           | 1910z | 23/10 [396/00] Out 1913z S9  | Malc           | SAT  |
|           | 1910z | 27/10 [392/00] Out 1913z S8  | Malc, Brixmis  | WED  |
|           | 1910z | 30/10 [395/00] Out 1913z S9  | Malc           | SAT  |
|           | -,    |  |                | ~    |
| 45051-11- | 1520- | 04/00 [265/00] Out 1522- 92 (Dutal SDR)  | M-1- HED       | CAT  |
| 4505kHz   |       | 04/09 [365/00] Out 1533z S3 (Dutch SDR)  | Male, HfD      | SAT  |
|           | 1530z | 05/09 [366/00] Out 1533z S2  | Malc, XAH      | SUN  |
|           | 1530z | 11/09 [364/00] Out 1533z S2  | Malc           | SAT  |
|           | 1530z | 12/09 [365/00] Out 1533z S2  | Malc           | SUN  |
|           | 1530z | 25/09 [366/35 8460359355] Out 1540z S3   | Malc           | SAT  |
|           | 1530z | 26/09 [366/35 84603etc] Repeat of Saturday                                       | Malc           | SUN  |
|           | 1530z | 10/10 [366/00]   | Brixmis, Malc  | SUN  |
|           |       |  |                |      |
|           | 1530z | 16/10 [368/00] Out 1533z S4  | Malc           | SAT  |
|           | 1530z | 17/10 [368/00] Out 1533z S2  | Malc           | SUN  |
|           | 1530z | 23/10 [364/00] Out 1533z S2  | Malc           | SAT  |
|           | 1530z | 24/10 [524/00] Out 1533z S3  | Malc           | SUN  |
|           | 1530z | 30/10 [363/00] Out 1533z S3  | Malc           | SAT  |
|           | 1530z | 31/10 [363/00] Out 1533z S3  | Malc           | SUN  |
|           | 1330Z | 51/10 [505/00] Out 15552 b5  | wate           | 501  |
| 500211    | 1.005 | 07/00 [007/00] O . 1700 . 00   | M. I. WALL HOD | CLDI |
| 5082khz   | 1605z | 05/09 [237/00] Out 1608z S2  | Malc, XAH, HfD | SUN  |
|           | 1605z | 07/09 [238/34 0999066520] Out 1615z S4   | Malc           | TUE  |
|           | 1605z | 12/09 [238/34 09990etc] Repeat of Tuesday  | Malc           | SUN  |
|           | 1605z | 21/09 [233/00] Out1608z S2   | Malc           | TUE  |
|           | 1605z | 26/09 [237/00] Out 1608z S5  | Malc           | SUN  |
|           | 1605z | 28/09 [238/00] Out 1608z S4  | Malc           | TUE  |
|           |       |  |                |      |
|           | 1605z | 05/10 [235/00] Out 1608z S4  | Malc           | TUE  |
|           | 1605z | 10/10 [238/00] Out 1608z S5  | Malc           | SUN  |
|           | 1605z | 12/10 [236/00] Out 1608z S3  | Malc           | TUE  |
|           | 1605z | 17/10 [231/00] Out 1608z S3  | Malc, Brixmis  | SUN  |
|           | 1605z | 19/10 [238/38 41679 50755 99605 50074 70828 85976 20205 9421861738 26389]        | Gary H         | TUE  |
|           | 1605z | 24/10 [238/38 41679etc] Repeat of Tuesday  | Malc           | SUN  |
|           | 1605z |  |                | TUE  |
|           |       | 26/10 [236/00] Out 1608z S4  | Male, Gary H   |      |
|           | 1605z | 31/10 [235/00] Out 1608z S5  | Malc           | SUN  |
|           |       |  |                |      |
| 5371kHz   | 1300z | 02/09 [311/00] Out 1303z S3 (Dutch SDR)  | Malc, HfD      | THU  |
|           | 1300z | 06/09 [315/00] Out 1303z S2 (Dutch SDR)  | Malc           | MON  |
|           | 1300z | 09/09 [319/00] Out 1303z S3 (Dutch SDR)  | Malc           | THU  |
|           | 1300z | 13/09 [310/00] Out 1303z S2  | Malc           | MON  |
|           |       |  |                |      |
|           | 1300z | 16/09 [313/00]   | XAH            | THU  |
|           | 1300z | 20/09 [314/32 46017 02656 82630 08381 64146 42825 23010 7426052769 03394]        | RNGB           | MON  |
|           | 1300z | 23/09 [314/32 46017 02656 82630 08381 64146 42825 2301052769 03394] Out 1310z S3 | XAH, Malc      | THU  |
|           | 1300z | 27/09 [316/00] Out 1303z S4 (Dutch SDR)  | Malc           | MON  |
|           | 1300z | 30/09 [310/00] Out 1303z S2  | Malc           | THU  |
|           | 0450z | 04/10 [412/00]   | HfD            | MON  |
|           |       |  |                |      |
|           | 1300z | 04/10 [313/00] Out 1303z S2  | Malc           | MON  |
|           | 1300z | 07/10 [310/00] Out 1303z S2  | Malc           | THU  |
|           | 1300z | 11/10 [316/39 4435647653] Out 1311z S2   | Malc           | MON  |
|           | 1300z | 14/10 [516/39 44356etc] Repeat of Monday   | Malc           | THU  |
|           | 1300z | 18/10 [319/00] Out 1303z S2  | Malc           | MON  |
|           | 0450z | 18/10 [415/00]   | HfD            | MON  |
|           | 1300z | 25/10 [314/00] Out 1333z S2  | Malc           | MON  |
|           |       |  |                |      |
|           | 1300z | 28/10 [310/00] Out 1303z S3  | Malc           | THU  |
|           |       |  |                |      |

| 5737kHz   | 1330z | 02/09 [524/36 6535206698] Out 1341z S2   | Malc, HfD       | THU |
|-----------|-------|--|-----------------|-----|
|           | 1330z | 09/09 [524/00] Out 1333z S3 (Dutch SDR)  | Malc            | THU |
|           | 1330z | 12/09 [527/00] Out 1333z S2  | Malc            | SUN |
|           | 1330z | 16/09 [525/00]   | XAH             | THU |
|           | 1330z | 23/09 [522/00] Out 1333z S3 (Dutch SDR)  | Malc, XAH       | THU |
|           | 1330z | 26/09 [521/00] Out 1333z S2  | Malc            | SUN |
|           | 1330z | 30/09 [520/00] Out 1333z S2  | Malc            | THU |
|           | 1330z |  | Malc            | THU |
|           |       | 14/10 [527/00] Out 1333z S3  |                 |     |
|           | 1330z | 17/10 [528/00] Out 1333z S3  | Malc            | SUN |
|           | 1330z | 24/10 [524/00] Out 1333z S3 (Dutch SDR)  | Malc            | SUN |
|           | 1330z | 28/10 [521/39 9059041606] Out 1341z S2   | Malc            | THU |
| 5941kHz   | 0820z | 09/09 [434/31 34593 60364 35721 31889 63877 28282 3476508850 50199] Out 0829z S3 | RNGB, Malc, HfD | THU |
|           | 0820z | 10/09 [434/31 34593etc] repeat of Thursday                                       | Malc            | FRI |
|           | 0820z | 17/09 [438/00]   | RNGB            | FRI |
|           | 0820z | 23/09 [435/00] Out 0823z S2  | Malc, XAH       | THU |
|           | 0820z | 24/09 [432/00] Out 0823z S2 (Dutch SDR)  | Malc            | FRI |
|           | 0820z | 01/10 [439/00]   | RNGB            | FRI |
|           | 0820z | 07/10 [435/00] Out 0823z S4  | Malc, RNGB      | THU |
|           | 0820z | 14/10 [434/00] Out 0823z S2  | Malc, RNGB      | THU |
|           | 0820z | 15/10 [431/00] Out 0823z S3  | Malc, RNGB      | FRI |
|           | 0820z | 22/10 [431/32 66759 86400 78946 66056 42794 89840 59645 3667301954] Out 0830z S3 |                 | FRI |
|           |       |  | RNGB, Malc      |     |
|           | 0820z | 28/10 [439/00] Out 0823z S2  | Malc            | THU |
|           | 0820z | 29/10 [432/00] Out 0823z S2  | Malc            | FRI |
| 6923kHz   | 1205z | 01/09 [465/00] Out 1208z S2  | Malc, HfD       | WED |
|           | 1625z | 01/09 [974/00] Out 1628z S4  | Malc, HfD       | WED |
|           | 1625z | 05/09 [975/00] Out 1628z S3  | Malc, XAH       | SUN |
|           | 1205z | 07/09 [466/35 8222602904] Out 1215z S3   | Malc            | TUE |
|           | 1205z | 08/09 [466/35 82226etc] Repeat of Tuesday  | Malc            | WED |
|           | 1625z | 08/09 [975/00] Out 1628z S5  | Malc, XAH       | WED |
|           | 1625z |  |                 |     |
|           |       | 12/09 [970/00] Out 1628z S4  | Malc            | SUN |
|           | 1205z | 15/09 [463/00] Out 1208z S3  | Malc            | WED |
|           | 1625z | 15/09 [976/00] Out 1628z S7  | Malc            | WED |
|           | 1205z | 21/09 [460/00] Out 1208z S2  | Malc, XAH       | TUE |
|           | 1205z | 22/09 [462/00] Out 1208z S2  | Malc            | WED |
|           | 1625z | 22/09 [972/32 4290412150] Out 1235z S5   | Malc            | WED |
|           | 1625z | 26/09 [972/32 42904etc] Repeat of Wednesday                                      | Malc            | SUN |
|           | 1205z | 28/09 [463/00] Out 1208z S2  | Malc            | TUE |
|           | 1205z | 29/09 [461/00] Out 1208z S2  | Malc            | WED |
|           | 1625z | 29/09 [977/00] Out 1628z S3  | Malc            | WED |
|           | 1205z | 05/10 [465/00] Out 1208z S2  | Malc            | TUE |
|           | 1715z | 06/10 [974/00]   | Ary             | WED |
|           | 1205z | 06/10 [465/00] Out 1208z S2  | Malc            | WED |
|           | 1205z | 12/10 [463/34 7447627722] Out 1215z S2   | Malc            | TUE |
|           |       |  | Malc            | WED |
|           | 1205z | 13/10 [463/34 74476etc] Repeat of Tuesday  |                 |     |
|           | 1715z | 13/10 [975/00] Out 1718z S5  | Malc            | WED |
|           | 1715z | 15/10 [975/00] Out 1718z S6  | Malc            | FRI |
|           | 1205z | 19/10 [461/00] Out 1208z S2  | Malc            | TUE |
|           | 1205z | 19/10 [461/00] Out 1208z S2  | Malc            | TUE |
|           | 1715z | 20/10 [970/40 6662349602] Out 1725z S5   | Malc            | WED |
|           | 1715z | 22/10 [970/40 66623etc] Repeat of Wednesday                                      | Malc            | FRI |
|           | 1205z | 26/10 [460/00] Out 1208z S3  | Malc            | TUE |
|           | 1205z | 27/10 [465/00] Out 1208z S2  | Malc, Brixmis   | WED |
|           | 1715z | 27/10 [977/00] Out 1718z S4  | Malc            | WED |
|           | 1715z | 29/10 [975/00] Out 1718z S7  | Malc            | FRI |
| CO 401 II | 0020  | 01/00/07/0010  | M 1 1100        | WED |
| 6940kHz   |       | 01/09 [276/00] Out 0933z S2  | Malc, HfD       | WED |
|           | 0930z | 02/09 [279/00] Out 0933z S2  | Malc, RNGB      | THU |
|           | 0930z | 08/09 [270/32 1279172492] Out 0940z S2   | Malc            | WED |
|           | 0930z | 09/09 [270/32 12791etc] Repeat of Wednesday                                      | Malc            | THU |
|           | 0930z | 15/09 [279/00] Out 0933z S2  | Malc            | WED |
|           | 0930z | 16/09 [278/00]   | RNGB            | THU |
|           | 0930z | 22/09 [273/00] Out 0933z S3  | Malc            | WED |
|           | 0930z | 23/09 [278/00] Out 0933z S2  | Malc            | THU |
|           | 0930z | 29/09 [271/00] Out 0933z S2  | Malc            | WED |
|           | 0930z | 30/09 [271/00] Out 0933z S3+QRM  | Malc            | THU |
|           | 0930z | 06/10 [275/00] Out 0933z S3+QKW  | Malc            | WED |
|           |       | . ,  |                 |     |
|           | 0930z | 07/10 [277/00] Out 0933z S2  | Malc. RNGB      | THU |
|           | 0930z | 13/10 [277/00] Out 0933z S3  | Malc            | WED |
|           | 0930z | 14/10 [273/00] Out 0933z S2  | Malc            | THU |
|           | 0930z | 20/10 [279/32 4663679432] Out 0940z S3   | Malc            | WED |

| 6940kHz   | 0930z<br>0930z | 27/10 [275/00] Out 0933z S2<br>28/10 [270/00] Out 0933z S2                          | Malc<br>Malc       | WED<br>THU |
|-----------|----------------|---|--------------------|------------|
|           |                |   |                    |            |
| 7317kHz   |                | 01/09 [698/00] Out 1048z S2   | Malc, RNGB, HfD    | WED        |
|           | 1900z<br>1045z | 02/09 [644/00] Out 1903z S5<br>06/09 [691/00] Out 1048z S2                          | Malc, HfD<br>Malc  | THU<br>MON |
|           | 1900z          | 06/09 [648/31 03822 44768] Out 1909z S7   | Malc               | MON        |
|           | 1045z          | 08/09 [694/00] Out 1048z S3   | Malc               | WED        |
|           | 1900z          | 09/09 [648/31 0382244768] Out 1909z S6  | Malc               | THU        |
|           | 1045z          | 13/09 [697/00] Out 1048z S2   | Malc               | MON        |
|           | 1900z          | 13/09 [646/00] Out 1903z S7   | Malc               | MON        |
|           | 1045z          | 15/09 [697/36 0048769477] Out 1056z S3  | Malc               | WED        |
|           | 1045z          | 20/09 [692/00] Out 1048z  | XAH                | MON        |
|           | 1045z          | 22/09 [696/00] Out 1048z S3   | Malc               | WED        |
|           | 1900z          | 23/09 [640/00] Out 1903z S3   | Male Male          | THU        |
|           | 1045z<br>1900z | 27/09 [691/00] Out 1048z S2<br>27/09 [643/00] Out 1913z S9                          | Malc<br>Malc       | MON<br>MON |
|           | 1900z<br>1900z | 30/09 [643/00]  | Gary H             | THU        |
|           | 1045z          | 04/10 [696/24 20951etc]   | Brixmis            | MON        |
|           | 1900z          | 04/10 [644/00] Out 1903z S7   | Malc               | MON        |
|           | 1045z          | 06/10 [696/24 2095186868] Out 1053z S5  | Malc               | WED        |
|           | 1900z          | 07/10 [641/00] Out 1903z S9   | Malc, Brixmis      | THU        |
|           | 1045z          | 11/10 [693/00]  | Brixmis, Malc      | MON        |
|           | 1900z          | 11/10 [641/00] Out 1903z S5   | Malc, Brixmis      | MON        |
|           | 1045z          | 13/10 [692/00] Out 1048z S2   | Malc               | WED        |
|           | 1900z          | 14/10 [640/00] Out 1903z S5   | Malc, Brixmis      | THU        |
|           | 1045z          | 18/10 [697/00] Out 1048z S3   | Malc               | MON        |
|           | 1900z          | 18/10 [647/33 4508485837] Out 1910z S3  | Malc               | MON        |
|           | 1045z          | 20/10 [696/00]  | Brixmis, Malc      | WED        |
|           | 1045z<br>1900z | 25/10 [696/00] Out 1048z S2<br>25/10 [640/00] Out 1903z S6                          | Malc<br>Malc       | MON<br>MON |
|           | 1900z<br>1045z | 27/10 [690/00] Out 19032 S0<br>27/10 [690/00] Out 1048z S2                          | Malc               | WED        |
|           | 10432          | 2//10 [050/00] Out 10402/32   | wate               | WLD        |
| 7864kHz   | 1730z          | 02/09 [414/00] Out 1733z S3   | Malc, HfD          | THU        |
|           | 1730z          | 09/09 [411/00] Out 1733z S4   | Malc               | THU        |
|           | 1730z          | 23/09 [411/00] Out 1733z S3   | Malc               | THU        |
|           | 1730z          | 30/09 [415/00] Out 1733z S5   | Malc               | THU        |
|           | 1730z          | 07/10 [411/00] Out 1733z S5   | Malc, dMHz         | THU        |
|           | 1730z          | 14/10 [4330812615]] Out 1741z S7 QSB3   | Malc               | THU        |
|           | 1730z          | 28/10 [411/00] Out 1733z S9   | Malc               | THU        |
| 8180kHz   | 0700z          | 03/09 [574/00] Out 0703z S5   | Malc, RNGB, HfD    | FRI        |
|           | 0700z          | 07/09 [576/00] Out 0703z S2   | Malc, RNGB         | TUE        |
|           | 0700z          | 10/09 [575/00] Out 0703z S5   | Malc               | FRI        |
|           | 0700z          | 17/09 [573/34 04785 11607 63703 36020 39555 04699 68398 4880559489 61588]           | RNGB, XAH          | FRI        |
|           | 0700z          | 21/09 [570/00] Out 0703z S4   | Malc, RNGB         | TUE        |
|           | 0700z          | 24/09 [571/00] Out 0703z S2   | Malc               | FRI        |
|           | 0700z          | 28/09 [574/00] Out 0703z S3   | Malc               | TUE        |
|           | 0700z          | 05/10 [579/00] Out 0703z S4   | Malc               | TUE        |
|           | 0700z<br>0700z | 12/10 [576/00] Out 0703z S2<br>15/10 [577/00] Out 0703z S4                          | Malc<br>Malc       | TUE<br>FRI |
|           | 0700z          | 19/10 [571/00] Out 0703z S5   | Malc, RNGB         | TUE        |
|           | 0700z          | 22/10 [574/00] Out 0703z S5   | Malc, RNGB         | FRI        |
|           | 0700z          | 26/10 [576/38 76419 60759 83260 47625 74558 06775 42224 6405975751 36237] Out 0710z |                    | TUE        |
|           | 0700z          | 29/10 [576/38 76419etc] Repeat of Tuesday   | RNGB               | FRI        |
| 0.4001.77 | 0.545          | 00/00/5514/003/007/002  | M. I. DAVOD MOD    |            |
| 8423kHz   |                | 02/09 [511/00] Out 0648z S2   | Malc, RNGB, HfD    | THU        |
|           | 0645z          | 07/09 [510/00] Out 0648z S3   | Male DNCD          | TUE        |
|           | 0645z<br>0645z | 09/09 [517/00] Out 0648z S3<br>16/09 [518/00]                                       | Malc. RNGB<br>RNGB | THU<br>THU |
|           | 0645z          | 21/09 [510/00] Out 0648z S3   | Malc, XAH          | TUE        |
|           | 0645z          | 23/09 [519/00] Out 0648z S3   | Malc, XAH          | THU        |
|           | 0645z          | 28/09 [510/35 8661651973] Out 0655z S3  | Malc               | TUE        |
|           | 0645z          | 30/09 [510/35 86616etc] Repeat of Tuesday   | Malc               | THU        |
|           | 0645z          | 05/10 [510/34 5747047414] Out 0655z S4  | Malc               | TUE        |
|           | 0645z          | 07/10 [510/34 57470etc] Repeat of Tuesday   | Malc               | THU        |
|           | 0645z          | 12/10 [512/00] Out 0648z S2+QRM   | Malc               | TUE        |
|           | 0645z          | 14/10 [514/00] Out 0648z S3   | Malc               | THU        |
|           | 0645z          | 19/10 [519/00] Out 0648z S5   | Malc, RNGB         | TUE        |
|           | 0645z          | 26/10 [512/00] Out 0648z S4   | Malc               | TUE        |
|           | 0645z          | 28/10 [514/00] Out 0648z S4   | Malc               | THU        |

| 8530kHz                                 | 1910z | 03/09 [614/34 9599080618] Out 1920z S8   | Malc, HfD       | FRI |
|---|-------|--|-----------------|-----|
|   | 1910z | 03/09 [614/34 95990etc] Repeat of Friday   | Malc            | SUN |
|   | 1910z | 10/09 [616/00] Out 1913z S7  | Malc            | FRI |
|   | 1910z | 12/09 [616/00] Out 1913z S7  | Malc            | SUN |
|   |       |  |                 |     |
|   | 1910z | 24/09 [618/00] Out 1913z S7  | Malc            | FRI |
|   | 1910z | 26/09 [614/00] Out 1913z S3  | Malc            | SUN |
|   | 1910z | 08/10 [613/00]   | RNGB            | FRI |
|   | 1910z | 10/10 [611/00]   | Brixmis         | SUN |
|   | 1910z | 15/10 [616/32 6110156734] Out 1920z S2 (Dutch SDR)                                 | Malc            | FRI |
|   | 1910z | 24/10 [617/00] Out 1913z S9  | Malc            | SUN |
|   | 1910z | 29/10 [610/00] Out 1913z S9  | Malc, Brixmis   | FRI |
|   | 1910Z | 25/10 [010/00] Out 1513235   | Maic, Brixinis  | TKI |
| 8680kHz                                 | 0600z | 05/09 [350/00] Out 0603z S3  | Malc            | SUN |
|   | 0600z | 17/09 [351/00]   | XAH             | FRI |
|   | 0600z | 24/09 [350/00]   | HfD             | FRI |
|   | 0600z | 26/09 [351/00] Out 0603z S5  | Malc            | SUN |
| 00701-11-                               | 0720- | 04/00 [401/00]   | A               | CAT |
| 9079kHz                                 |       | 04/09 [491/00]   | Ary             | SAT |
|   | 0730z | 05/09 [498/00] Out 0733z S6  | Malc, HfD       | SUN |
|   | 0730z | 11/09 [491/00] Out 0733z S3  | Malc, RNGB      | SAT |
|   | 0730z | 12/09 [496/00] Out 0733z S2  | Malc            | SUN |
|   | 0730z | 25/09 [495/35 7688709378] Out 0740z S3   | Malc            | SAT |
|   | 0730z | 26/09 [495/35 76887etc] Repeat of Saturday   | Malc            | SUN |
|   |       |  | HfD             |     |
|   | 0730z | 02/10 [495/00]   |                 | SAT |
|   | 0730z | 03/10 [496/00]   | RNGB            | SUN |
|   | 0700z | 09/10 [497/32 59670 85940 42623 47893 55569 04876 1423603233] Out 0740z S5         | RNGB, Malc      | SAT |
|   | 0700z | 10/10 [497/32 59670etc] Repeat of Saturday   | Malc            | SUN |
|   | 0730z | 16/10 [497/00] Out 0733z S3  | Malc, RNGB      | SAT |
|   | 0730z | 17/10 [490/00] Out 0733z S3  | Malc            | SUN |
|   | 0730z |  | Malc            | SAT |
|   |       | 23/10 [496/00] Out 0733z S3  |                 |     |
|   | 0730z | 24/10 [496/00] Out 0733z S3  | Malc            | SUN |
|   | 0730z | 30/10 [490/00] Out 0733z S3  | Malc            | SAT |
|   | 0730z | 31/10 [495/00] Out 0733z S4  | Malc            | SUN |
| 9951kHz                                 | 1000z | 03/09 [306/00]   | Ary             | FRI |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1000z | 07/09 [305/20 5418970927] Out 1007z S2   | Malc, HfD       | TUE |
|   |       |  |                 |     |
|   | 1000z | 10/09 [305/20 54189etc] Repeat of Tuesday  | Malc            | FRI |
|   | 1000z | 21/09 [306/00] Out 1003z S3  | Malc            | TUE |
|   | 1000z | 24/09 [306/00] Out 1003z S2  | Malc            | FRI |
|   | 1000z | 28/09 [305/00] Out 1003z S2  | Malc            | TUE |
|   | 1000z | 05/10 [306/00] Out S3  | Malc, RNGB      | TUE |
|   | 1000z | 12/10 [302/00] Out 1003z S4  | Malc            | TUE |
|   |       |  |                 |     |
|   | 1000z | 19/10 [307/00] Out 1003z S3  | Malc            | TUE |
|   | 1000z | 22/10 [306/00] Out 1003z S3  | Malc, Brixmis   | FRI |
|   | 1000z | 26/10 [307/35 0348919161] Out 1010z S3   | Malc            | TUE |
|   | 1000z | 29/10 [307/35 03489etc] Repeat of Tuesday  | Malc            | FRI |
| 9963kHz                                 | 07157 | 03/09 [633/00] Out 0718z S5  | Malc, RNGB, HfD | FRI |
| //UJK11Z                                | 0715z | 07/09 [635/38 98002 41392 48217 57376 64795 98656 3817805519 9378093780] Out 0726z | RNGB, Malc      | TUE |
|   |       |  |                 |     |
|   | 0715z | 10/09 [635/38 98002etc] Repeat of Tuesday  | Malc            | FRI |
|   | 0715z | 17/09 [630/00] Out 0718z   | XAH, RNGB       | FRI |
|   | 0715z | 21/09 [631/00] Out 0718z S5  | Malc, RNGB      | TUE |
|   | 0715z | 24/09 [635/00] Out 0718z S5  | Malc            | FRI |
|   | 0715z | 28/09 [631/00] Out 0718z S4  | Malc            | TUE |
|   | 0715z |  |                 | TUE |
|   |       | 05/10 [630/00] Out 0718z S9  | Malc            |     |
|   | 0715z | 12/10 [633/00] Out 0718z S3  | Malc            | TUE |
|   | 0715z | 15/10 [636/00] Out 0718z S4  | Malc            | FRI |
|   | 0715z | 19/10 [631/00] Out 0718z S5  | Malc, RNGB      | TUE |
|   | 0715z | 22/10 [630/00] Out 0715z S3  | Mal, RNGB       | FRI |
|   | 0715z | 26/10 [639/38 40666 45893 33194 77414 34133 15949 8020134983 33250] Out 0726z S4   | RNGB, Malc      | TUE |
|   | 0715z | 29/10 [639/38 40666etc] Repeat of Tuesday  | Malc            | FRI |
|   |       |  |                 |     |
| 9968kHz                                 |       | 06/09 [532/00] Out 0903z S3  | Malc, HfD       | MON |
|   | 0900z | 08/09 [530/00] Out 0903z S6  | Malc            | WED |
|   | 0900z | 13/09 [534/00] Out 0903z S4  | Malc, XAH       | MON |
|   | 0900z | 15/09 [532/00] Out 0903z S4  | Malc            | WED |
|   | 0900z | 20/09 [534/32 85307 65628 17964 98861 57287 70652 8596404996]                      | RNGB            | MON |
|   | 0900z | 22/09 [534/32 8530704996] Out 0910z S3   | Malc            | WED |
|   |       |  |                 |     |
|   | 0900z | 27/09 [533/00] Out 0903z S2  | Malc, RNGB      | MON |
|   | 0900z | 29/09 [532/00] Out 0903z S3  | Malc            | WED |
|   | 0900z | 04/10 [538/00] Out 0903z S5  | Malc            | MON |
|   | 0900z | 06/10 [537/00] Out 0903z S3  | Malc            | WED |
|   |       |  |                 |     |

| 9968kHz  | 0900z | 11/10 [538/00] Out 0903z S3  | Malc                                  | MON     |
|----------|-------|--|---------------------------------------|---------|
|          | 0900z | 13/10 [536/00] Out 0903z S3  | Malc                                  | WED     |
|          | 0900z | 18/10 [534/35 3835726030] Out 0910z S2   | Malc                                  | MON     |
|          |       | · ·  | Malc                                  | WED     |
|          | 0900z | 20/10 [534/35 38357etc] Repeat of Monday   |                                       |         |
|          | 0900z | 25/10 [533/00] Out 0903z S2  | Malc                                  | MON     |
|          | 0900z | 27/10 [537/00] Out 0903z S3  | Malc                                  | WED     |
|          |       |  |                                       |         |
| 10213khz | 0745z | 06/09 [269/00] Out 0748z S3  | Malc                                  | MON     |
|          | 0745z | 13/09 [260/36 90212 79631 07202 73398 12836 13823 93751 6324086693 32934] Out 0755z    | RNGB, Malc                            | MON     |
|          | 0745z | 20/09 [264/00]   | RNGB                                  | MON     |
|          |       |  |                                       |         |
|          | 0745z | 27/09 [262/00] Out 0748z S7  | Malc                                  | MON     |
|          | 0745z | 04/10 [262/00] Out 0748z S6  | Malc                                  | MON     |
|          | 0745z | 11/10 [267/00]   | Brixmis, Malc                         | MON     |
|          | 0745z | 18/10 [266/00] Out 0748z S3  | Malc, RNGB                            | MON     |
|          | 0745z | 25/10 [264/32 1264161892] Out 0755z S9   | Malc                                  | MON     |
|          |       |  |                                       |         |
| 10330kHz | 1530z | 02/09 [261/00] Out 1533z S9  | Male, HfD                             | THU     |
|          | 1530z | 09/09 [261/00] Out 1533z S9  | Malc                                  | THU     |
|          |       |  |                                       |         |
|          | 1530z | 23/09 [262/00] Out 1533z S9  | Malc, Gary H                          | THU     |
|          | 1530z | 30/09 [267/00] Out 1533z S9  | Malc                                  | THU     |
|          | 1530z | 14/10 [264/00] Out 1533z S9  | Malc                                  | THU     |
|          | 1530z | 20/10 [261/00]   | Gary H                                | THU     |
|          | 1530z | 28/10 [264/32 12641 82441 62916 95266 81474 96485 79238 0519078127 61892] Out 1540z    | •                                     | THU     |
|          | 13302 | 20/10 [20/102/102/11 02/11 02/10/02/00 011/17/0103/7/230 031/01/012/ 010/2] Out 13/102 | Gary 11, Marc, Brixing                | 1110    |
| 11092khz | 0315z | 09/09 [250/00]   | HfD                                   | THU     |
|          |       |  |                                       |         |
| 11116kHz | 1650z | 03/09 [927/00] Out 1653z S2  | Malc, HfD                             | FRI     |
|          | 1650z | 05/09 [921/00] Out 1653z S7  | Malc, XAH                             | SUN     |
|          | 1650z |  | Malc                                  | FRI     |
|          |       | 10/09 [920/00] Out 1653z S9  |                                       |         |
|          | 1650z | 12/09 [920/00] Out 1653z S2  | Malc                                  | SUN     |
|          | 1650z | 24/09 [929/00] Out 1653z S9  | Malc                                  | FRI     |
|          | 1650z | 26/09 [920/00] Out 1653z S7  | Malc                                  | SUN     |
|          | 1650z | 10/10 [922/40 0793609600] Out 1701z S5   | Malc                                  | SUN     |
|          | 1650z | 15/10 [927/00] Out S5  | Male, RNGB                            | FRI     |
|          |       |  |                                       |         |
|          | 1650z | 17/10 [927/00] Out 1653z S3  | Malc                                  | SUN     |
|          | 1650z | 22/10 [920/00]   | Gary H                                | FRI     |
|          | 1650z | 24/10 [927/00] Out 1653z S8  | Malc                                  | SUN     |
|          | 1650z | 29/10 [927/00] Out 1653z S7  | Malc, Gary H                          | FRI     |
|          | 1650z | 31/10 [927/00] Out 1653z S5  | Malc                                  | SUN     |
|          |       | [ ]  |                                       | ~ ~ ~ . |
| 12202kHz | 08457 | 01/09 [711/00] Out 0848z S4  | Malc, RNGB, HfD                       | WED     |
|          |       |  | · · · · · · · · · · · · · · · · · · · |         |
|          | 0845z | 02/09 [150/00] Out 0848z S4  | Malc, RNGB, HfD                       | THU     |
|          | 0845z | 06/09 [718/00] Out 0848z S6  | Malc                                  | MON     |
|          | 0845z | 06/09 [718/00] Out 0848z S6  | Malc                                  | MON     |
|          | 0845z | 07/09 [152/23 89105 87650 87504 68887 60284 83275 91789 2804450118 35904] Out 0853z    | RNGB. Malc                            | TUE     |
|          | 0845z | 08/09 [718/00] Out 0848z S9  | Malc                                  | WED     |
|          | 0845z | 09/09 [152/23 8910535904] Out 0853z S3   | Malc                                  | THU     |
|          |       |  |                                       |         |
|          | 0845z | 13/09 [714/00] Out 0848z S3  | Malc, XAH                             | MON     |
|          | 0845z | 14/09 [152/00]   | RNGB                                  | TUE     |
|          | 0845z | 15/09 [711/00] Out 0848z S5  | Malc                                  | WED     |
|          | 0845z | 21/09 [150/00] Out 0848z S6  | Malc                                  | TUE     |
|          | 0845z | 22/09 [714/34 57566 48926 30831 89930 69436 96060 9469112332] Out 0855z S4             | RNGB, Malc                            | WED     |
|          |       |  |                                       |         |
|          | 0845z | 23/09 [156/00] Out 0848z S9  | Malc, XAH                             | THU     |
|          | 0845z | 27/09 [711/00] Out 0848z S5  | Malc                                  | MON     |
|          | 0845z | 29/09 [714/00] Out 0848z S9  | Malc                                  | WED     |
|          | 0845z | 30/09 [152/00] Out 0848z S4  | Malc                                  | THU     |
|          | 0845z | 04/10 [716/36 3614848755] Out 0856z S7   | Malc                                  | MON     |
|          | 0845z | 05/10 [156/00] Out S5  | Malc                                  | TUE     |
|          |       |  |                                       |         |
|          | 0845z | 06/10 [716/36 36148etc] repeat of Monda  | Malc                                  | WED     |
|          | 0845z | 07/10 [155/00] Out 0848z S4  | Malc, RNGB                            | THU     |
|          | 0845z | 11/10 [711/00] Out 0848z S8  | Malc                                  | MON     |
|          | 0845z | 12/10 [156/00] Out 1048z S5  | Malc                                  | TUE     |
|          | 0845z | 13/10 [710/00] Out 0848z S3  | Malc                                  | WED     |
|          |       |  |                                       |         |
|          | 0845z | 14/10 [151/00] Out 0848z S3  | Malc, RNGB                            | THU     |
|          | 0845z | 18/10 [710/00] Out 0848z S2  | Malc, RNGB                            | MON     |
|          | 0845z | 19/10 [152/00] Out 0848z S5  | Malc, RNGB                            | TUE     |
|          | 0845z | 20/10 [716/00] Out 0848z S3  | Malc                                  | WED     |
|          | 0845z | 25/10 [716/00] Out 0848z S5  | Malc                                  | MON     |
|          | 0845z | 26/10 [155/35 7003609935] Out 0855z S5   | Malc                                  | TUE     |
|          |       |  |                                       |         |
|          | 0845z | 27/10 [711/00] Out 0848z S3  | Malc                                  | WED     |
|          | 0845z | 28/10 [155/35 7003609935] Out 0855z S5   | Malc                                  | THU     |
|          |       |  |                                       |         |

| 12530kHz 1230z   | 09/09 [337/00]  | Ary                                     | THU   |
|--|---|---|---|
| 1230z  | 21/09 [330/00] Out 1233z S4   | Malc                                    | TUE   |
| 1230z  | 23/09 [335/00] Out 1233z S3   | Malc, XAH                               | THU   |
| 1230z  | 28/09 [333/00] Out 1233z S5   | Malc                                    | TUE   |
| 1230z  | 30/09 [332/00] Out 1233z S3   | Malc                                    | THU   |
|  |   |   |   |
| 1230z  | 05/10 [334/00] Out 1233z S4   | Malc                                    | TUE   |
| 1230z  | 07/10 [337/00] Out 1233z S7   | Malc                                    | THU   |
| 1230z  | 12/10 [333/25 7363866232] Out 1240z S3  | Malc                                    | TUE   |
| 1230z  | 14/10 [333/35 73638etc] Repeat of Tuesday   | Malc                                    | THU   |
| 1230z  | 19/10 [337/00] Out 1233z S5   | Malc                                    | TUE   |
| 1230z  | 26/10 [337/00] Out 1233z S4   | Malc                                    | TUE   |
| 1230z  | 28/10 [335/00] Out 1233z S3   | Malc                                    | THU   |
| 12302  | 20/10 [335/00] Out 12352 53   | Mare                                    | 1110  |
| 12470111 1745  | 05/00 [047/00] Q 4 1740   G2  | WALL MILLION                            | CLINI   |
| 13470kHz 1745z   | 05/09 [247/00] Out 1748z S2   | XAH, Malc. HfD                          | SUN   |
| 1745z  | 06/09 [244/00] Out 1748z S2   | Malc                                    | MON   |
| 1745z  | 12/09 [247/00] Out 1748z S3 (Dutch SDR)   | Malc                                    | SUN   |
| 1745z  | 13/09 [242/00] Out 1748z S2+QRM   | Malc                                    | MON   |
| 1745z  | 26/09 [240/35 5759848499] Out 1755z S2  | Malc                                    | SUN   |
| 1745z  | 27/09 [249/00] Out 1748z S2   | Malc                                    | MON   |
| 1745z  | 10/10 [249/37 6373618999] Out 1756z S3 (Dutch SDR)  | Malc                                    | SUN   |
| 1745z  | 11/10 [248/00] Out 1748z S2 (Dutch SDR)   | Malc                                    | MON   |
|  |   |   |   |
| 1745z  | 17/10 [245/00] Out 1748z S2 (Dutch SDR)   | Malc                                    | SUN   |
| 1745z  | 18/10 [247/00] Out 1748z S2   | Malc                                    | MON   |
| 1745z  | 24/10 [245/00] Out 1748z S2 (Dutch SDR)   | Malc                                    | SUN   |
| 1745z  | 25/10 [248/00] Out 1748z S2   | Malc                                    | MON   |
| 1745z  | 31/10 [240/00] Out 1748z S2   | Malc                                    | SUN   |
|  |   |   |   |
| 14865kHz 0640z   | 01/09 [942/00] Out 0643z  | Malc, RNGB                              | WED   |
| 0745z  | 02/09 [224/00]  | RNGB, HfD                               | THU   |
|  |   |   |   |
| 0640z  | 06/09 [948/24 36741 92849 57733 59635 80213 47266 6807200851] Out 0648z S3  | RNGB, Malc, HfD                         | MON   |
| 0745z  | 07/09 [223/00] Out 0748z S2   | Malc, RNGB                              | TUE   |
| 0640z  | 08/09 [948/24 3674100851] Out 0647z S2 (Dutch SDR)  | Malc                                    | WED   |
| 0745z  | 09/09 [229/00] Out 0748z S3   | Malc, RNGB                              | THU   |
| 0640z  | 15/09 [946/00] Out 0643z S3 (Dutch SDR)   | Malc, RNGB                              | WED   |
| 0745z  | 21/09 [228/00] Out 0748z S2   | Malc, RNGB                              | TUE   |
| 0640z  | 22/09 [942/00] Out 0643z S2 (Dutch SDR)   | Malc                                    | WED   |
| 0745z  | 23/09 [229/00] Out 0748z S2   | Malc, XAH                               | THU   |
|  |   |   |   |
| 0640z  | 27/09 [944/00] Out 0643z S3 (Dutch SDR)   | Malc                                    | MON   |
| 0745z  | 28/09 [225/00] Out 0748z S2   | Malc, RNGB                              | TUE   |
| 0640z  | 29/09 [946/00] Out 0643z S2   | Malc                                    | WED   |
| 0745z  | 30/09 [225/00] Out 0748z S3   | Malc                                    | THU   |
| 0640z  | 04/10 [942/43 8156759433] Out 0653z S2 (Dutch SDR)  | Malc                                    | MON   |
| 0745z  | 05/10 [220/00] Out 0748z S2   | Malc, RNGB                              | TUE   |
| 0640z  | 06/10 [942/23 8156759433] Out 0648z S3 (Dutch SDR)  | Malc                                    | WED   |
| 0745z  | 07/10 [220/00] Out 0748z S2   | Malc                                    | THU   |
|  |   |   |   |
| 0640z  | 11/10 [949/00] Out 0643z S2 (Dutch SDR)   | Malc                                    | MON   |
| 0745z  | 12/10 [220/00] Out 0748z S2 (Dutch SDR)   | Malc, RNGB                              | TUE   |
| 0640z  | 13/10 [942/00] Out 0643z S2   | Malc                                    | WED   |
| 0745z  | 14/10 [229/00] Out 0748z S2   | Malc, RNGB                              | THU   |
| 0640z  | 18/10 [941/00]  | RNGB                                    | MON   |
| 0745z  | 19/10 [228/35 17529 92591 79161 54036 74719 91520 00238 1476006204] Out 0755z S3  | RNGB, Malc                              | TUE   |
| 0640z  |   | Malc, RNGB                              | WED   |
|  | 20/10 1941/001 Out 0643z S2   |   |   |
|  | 20/10 [941/00] Out 0643z S2<br>25/10 [946/00] Out 0643z S2 (Dutch SDR)  |   |   |
| 0640z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)   | Malc                                    | MON   |
| 0640z<br>0745z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6  | Malc<br>Malc                            | MON<br>TUE  |
| 0640z<br>0745z<br>0640z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6<br>27/10 [945/00] Out 0643z S2   | Malc<br>Malc<br>Malc                    | MON<br>TUE<br>WED   |
| 0640z<br>0745z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6  | Malc<br>Malc                            | MON<br>TUE  |
| 0640z<br>0745z<br>0640z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6<br>27/10 [945/00] Out 0643z S2   | Malc<br>Malc<br>Malc                    | MON<br>TUE<br>WED   |
| 0640z<br>0745z<br>0640z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6<br>27/10 [945/00] Out 0643z S2   | Malc<br>Malc<br>Malc                    | MON<br>TUE<br>WED   |
| 0640z<br>0745z<br>0640z<br>0745z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR)<br>26/10 [224/00] Out 0748z S6<br>27/10 [945/00] Out 0643z S2<br>28/10 [221/00] Out 0748z S9  | Malc<br>Malc<br>Malc<br>Malc            | MON<br>TUE<br>WED<br>THU  |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR)  | Malc Malc Malc Malc Malc Malc           | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE                                    |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE                             |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5 25/09 [917/31 86261etc] Repeat of Tuesday   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE<br>SAT                      |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE                             |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5 25/09 [917/31 86261etc] Repeat of Tuesday 28/09 [917/00] Out 1348z S4   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE<br>SAT<br>TUE               |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1345z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5 25/09 [917/31 86261etc] Repeat of Tuesday 28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE<br>SAT<br>TUE<br>MON        |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/35 34957etc] Repeat of Monday   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE<br>SAT<br>TUE               |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1345z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR) 26/10 [224/00] Out 0748z S6 27/10 [945/00] Out 0643z S2 28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2 07/09 [910/00] Out 1348z S2 (Italian SDR) 21/09 [917/31 8626116393] Out 1355z S5 25/09 [917/31 86261etc] Repeat of Tuesday 28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE TUE SAT TUE MON                                   |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>15632kHz 0715z<br>0715z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/35 34957etc] Repeat of Monday   | Malc Malc Malc Malc Malc Malc Malc Malc | MON<br>TUE<br>WED<br>THU<br>SAT<br>TUE<br>TUE<br>SAT<br>TUE<br>MON<br>WED |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>15632kHz 0715z<br>0715z<br>0715z   | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/30] Out 0718z S3  15/09 [752/00] Out 0718z S2   | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE TUE SAT TUE MON WED MON WED                       |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352<br>1352 | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/00] Out 0718z S3  15/09 [752/00] Out 0718z S2  20/09 [751/00]   | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE TUE SAT TUE MON WED MON WED MON                   |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1375z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/00] Out 0718z S3  15/09 [752/00] Out 0718z S2  20/09 [751/00]  22/09 [750/00] Out 0718z S2  | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE SAT TUE MON WED MON WED MON WED                   |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1375z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/30] Out 0718z S3  15/09 [752/00] Out 0718z S2  20/09 [751/00]  22/09 [750/00] Out 0718z S2  27/09 [751/00] Out 0718Z S3 (Dutch SDR) | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE SAT TUE MON WED MON WED MON WED MON               |
| 0640z<br>0745z<br>0640z<br>0745z<br>14972kHz 1345z<br>1345z<br>1345z<br>1345z<br>1345z<br>1375z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z<br>0715z  | 25/10 [946/00] Out 0643z S2 (Dutch SDR)  26/10 [224/00] Out 0748z S6  27/10 [945/00] Out 0643z S2  28/10 [221/00] Out 0748z S9  04/09 [914/00] Out 1348z S2  07/09 [910/00] Out 1348z S2 (Italian SDR)  21/09 [917/31 8626116393] Out 1355z S5  25/09 [917/31 86261etc] Repeat of Tuesday  28/09 [917/00] Out 1348z S4  06/09 [754/35 34957 71593 33945 99356 5446682801 2139497631 84522] Out 0725z S2  08/09 [754/00] Out 0718z S3  15/09 [752/00] Out 0718z S2  20/09 [751/00]  22/09 [750/00] Out 0718z S2  | Malc Malc Malc Malc Malc Malc Malc Malc | MON TUE WED THU SAT TUE SAT TUE MON WED MON WED MON WED                   |

| 0715z          | 06/10 [755/00] Out 0718z S2  | Malc            | WED |
|----------------|--|-----------------|-----|
| 0715z          | 11/10 [759/00] Out 0718z S2  | Malc            | MON |
| 0715z          | 13/10 [755/00] Out 0718z S2  | Malc            | WED |
| 0715z          | 20/10 [753/34 18848 05713 58786 08689 84204 48679 3659802972 42014] Out 0725z S2 | RNGB, Malc      | WED |
| 0715z          | 25/10 [750/00] Out 0718z S5  | Malc            | MON |
| 0715z          | 27/10 [759/00] Out 0718z S4  | Malc            | WED |
|                |  |                 |     |
| 17410kHz 0745z | 01/09 [342/39 47125 68816 61608 58228 24783 32212 9131794103 75050] Out 0756z S3 | RNGB, Malc, HfD | WED |
| 0745z          | 03/09 [342/39 47125etc] Repeat of Wednesday                                      | RNGB            | FRI |
| 0745z          | 08/09 [346/00] Out 0748z S2 (Dutch SDR)  | Malc            | WED |
| 0745z          | 10/09 [340/00] Out 0748z S2 (Dutch SDR)  | Malc            | FRI |
| 0745z          | 15/09 [349/00] Out 0748z S2  | Malc            | WED |
| 0745z          | 17/09 [346/00]   | RNGB            | FRI |
| 0745z          | 22/09 [349/00] Out 0748z S2 (Dutch SDR)  | Malc            | WED |
| 0745z          | 24/09 [347/00]   | Ary, Malc, RNGB | FRI |
| 0745z          | 29/09 [342/00] Out 0748z S2 (Dutch SDR)  | Malc, RNGB      | WED |
| 0745z          | 01/10 [343/00]   | RNGB            | FRI |
| 0745z          | 06/10 [344/00] Out 0748z S2 (Dutch SDR)  | Malc            | WED |
| 0745z          | 08/10 [344/00]   | RNGB            | FRI |
| 0745z          | 15/10 [346/33 16376 01336 79324 96540 47818 79603 1173570611 11535] Out 0755z S2 | RNGB, Malc      | FRI |
| 0745z          | 20/10 [344/00] Out 0748z S2 (Dutch SDR)  | Malc, RNGB      | WED |
| 0745z          | 22/10 [348/00] Out 0748z S2 (Dutch SDR)  | Malc, RNGB      | FRI |
| 0745z          | 27/10 [344/00] Out 0748z S2  | Malc, RNGB      | WED |
| 0745z          | 29/10 [349/00] Out 0748z S2 (Dutch SDR)  | Malc            | FRI |
| 10104111 0000  | 04/00/04/04/04/04/04/04/04/04/04/04/04/0   | M.I. DNGD HOD   | WED |
| 19184kHz 0820z | 01/09 [133/00] Out 0823z S2  | Malc, RNGB, HfD | WED |
| 0820z          | 07/09 [138/00]   | RNGB            | TUE |
| 0820z          | 08/09 [130/00] Out 0823z S3 (Swiss SDR)  | Malc            | WED |
| 0820z          | 14/09 [134/00]   | RNGB            | TUE |
| 0820z          | 15/09 [133/00] Out 0823z S4 (Finnish SDR)  | Malc            | WED |
| 0820z          | 21/09 [135/36 73415 76031 22755 45634 18324 83335 7341154906 04709]              | RNGB            | TUE |
| 0820z          | 22/09 [135/36 7341504709] Out 0830z S2 (Finnish SDR)                             | Malc            | WED |
| 0820z          | 28/09 [131/00] Out 0823z S2 (Dutch SDR)  | Malc, RNGB      | TUE |
| 0820z          | 29/09 [134/00] Out 0823z S3 (Finnish SDR)  | Malc            | WED |
| 0820z          | 05/10 [134/00] Out S2 (Dutch SDR)  | Malc, RNGB      | TUE |
| 0820z          | 06/10 [135/00]   | RNGB            | WED |
| 0820z          | 13/10 [133/34 1333296448] Out 0830z S4 (Finnish SDR)                             | Malc            | WED |
| 0820z          | 19/10 [133/00] Out 0823z S2 (Dutch SDR)  | Malc, RNGB      | TUE |
| 0820z          | 20/10 [138/00] Out 0823z S2 (Dutch SDR)  | Malc            | WED |
| 0820z          | 26/10 [132/00] Out 0823z S2 (Dutch SDR)  | Malc            | TUE |
| 0820z          | 27/10 [136/00] Out 0823z S2  | Malc            | WED |

## E17z

### Decent training message intercepted by Edd:

10240kHz 1200z 14/09 strong

274 509 16 51809 31808 71909 83981 24035 48115 14151 51809 23807 15521 96111 10544 98003 68909 45279 43828 509 16 00000

Courtesy Edd Smith via. SDR Enschede.

### $[See\ Editorial/Intro/Zapad-21\ also]$

### Thursday

### September 2021

| 0800z | 14260kHz | 0810z      | 12930kHz                          |                                 |
|-------|----------|------------|-----------------------------------|---------------------------------|
| 02/09 | 217 460  | 5 52401 48 | 754 65125 41879 84648 460 5 00000 | 0800z Fair, 0810z Weak          |
| 09/09 | 217 460  | 5 52401 48 | 754 65125 41879 84648 460 5 00000 | Weak                            |
| 23/09 | 217 409  | 5 37184 36 | 129 33983 83221 85246 409 5 00000 | Weak                            |
| 30/09 | 217 000  | 00         |                                   | 0800z Fair, 0810z Weak with QRM |

### October 2021

| 0800z | 14260kHz | 0810z      | 12930kHz                          |                        |      |
|-------|----------|------------|-----------------------------------|------------------------|------|
| 07/10 | 217 468  | 5 88620 58 | 069 77632 67543 57440 468 5 00000 | [0810z Dutch SDR, QRM] | Weak |
| 14/10 | 217 468  | 5 88620 58 | 069 77632 67543 57440 468 5 00000 | [0810z Dutch SDR, QRM] | Weak |
| 21/10 | 217 840  | 5 05573 41 | 987 95692 83209 69817 840 5 00000 | [0810z QRM]            | Weak |
| 28/10 | 217 840  | 5 05573 41 | 987 95692 83209 69817 840 5 00000 | [0810z QRM]            | Weak |

## <u>S06</u>

### **S06 log Sept 2021**

| Thursday | rs (Repeats Friday)                    | 0830z 19035kHz             | 0930z 15645kHz                      |                                     |
|----------|--|----------------------------|-------------------------------------|-------------------------------------|
| 02/09    | '842' 567 33 23465 03437 89917 38154 9 | 97197 00203 71560 22076 28 | 447 80179 17655 22009 76349 15473 9 | 06085 88299 92696 40335 79260 64988 |
|          | 11259 66448 64925 11676 5              | 50875 67191 40838 46586 74 | 511 91639 98618 34252 11451 567 33  | 00000] 0840z                        |
| 09/09    | '842' 910 34 73803 32999 54159 27010 5 | 57211 16402 70479 42548 91 | 605 06944 91332 63999 67116 37375 6 | 55992 40347 16714 87861 46827 66116 |
|          | 51486 81096 58602 96656 8              | 80768 01726 89370 71325 71 | 834 13531 70126 80525 28819 72803 9 | 910 34 00000                        |
| 23/09    | '842' 950 36 09378 61956 36545 62711 5 | 58419 80098 23078 30248 49 | 258 94130 62642 26148 74531 26196 3 | 35749 76969 62009 65128 11447 27346 |
|          | 06821 21306 90334 98802 8              | 84235 84336 61733 19358 16 | 457 50758 10952 03626 91853 13956 3 | 37595 88081 950 36 00000            |
| 30/09    | '842' 165 37 34945 44525 86956 72181 9 | 00732 05974 21507 55210 25 | 902 25227 51097 51315 54917 51327 7 | 79602 48212 33029 18908 47060 55435 |
|          | 29661 58857 01731 58408 6              | 67517 37592 15233 87849 38 | 343 79638 14174 71692 31291 53195 2 | 26725 61714 34818 165 00000         |

| Fridays (1st & 3rd    |               | <b>1900z</b><br>6820kHz) | 9056khz 2000z 6825kHz  |
|-----------------------|---------------|--------------------------|--|
| 03/07 /00 000         | (useu )       | 0020KHZ)                 |  |
| S06s Sept log:        |               |                          |  |
| Monday                | 0.520.10.5.10 | 22107/20070              | (1/2) 510 5 (1/2) 5015 5015 5015 5015 5015 5015 5015 501                               |
| 6th/13th              | 0630/0640z    | 22185/20050              | '462' 519 7 61881 70151 56499 37086 11887 44066 95516                                  |
| 20th/27th             | 0020/0040     | 0000/0070                | '462' 973 5 11171 64385 82707 06123 22536  |
| 6th/13th              | 0830/0840z    | 9220/8270                | '764' 915 8 83830 93731 58291 64212 67195 31960 56970 32453                            |
| 20th/27th<br>6th/13th | 0900/0910z    | 14580/13165              | '764' 231 5 40614 77249 40678 17976 21816<br>'232' 806 5 35673 81934 80610 87030 86310 |
| 20th/27th             | 0900/0910Z    | 14380/13103              | 232 806 5 35675 81934 80610 87030 86510<br>'232' 986 5 39534 17228 15636 47891 23274   |
| 6th/13th              | 1200/1210z    | 9145/11460               | 149' 837 5 22174 82024 08127 51012 43764   |
| 20th/27th             | 1200/1210Z    | 9143/11400               | 149 837 3 22174 82024 08127 31012 43704<br>149, 238 5 88620 58069 61732 74537 57440    |
| 2011/27111            |               |                          | 149 238 3 88020 38009 01/32 /4337 3/440  |
| Tuesday               |               |                          |  |
| 7th/14th              | 0600/0610z    | 15855/16485              | '438' 216 5 09721 52734 77985 44367 51012  |
| 21st/28th             |               |                          | '438' 962 5 65906 66610 20336 17301 88554  |
| 7th/14th              | 0700/0710z    | 5760/6930                | '452' 908 6 04537 87875 47152 34566 80331 17613  |
| 21st/28th             |               |                          | '452' 817 6 88620 58069 61732 74537 57440 10597  |
| 7th/14th              | 0730/0740z    | 7425/11560               | '427' 590 6 06376 48054 133671 19474 34978 38865                                       |
| 21st/28th             |               |                          | '427' 903 5 11161 64385 82707 06123 22546  |
| 7th/14th              | 0800/0810z    | 11635/10420              | 127° 435 6 35673 81934 80610 87030 68010 61121   |
| 21st/28th             |               |                          | 127° 496 5 65906 66610 20336 17301 88554   |
| 7th/14th              | 1000/1010z    | 6410/7340                | '427' 968 5 27448 67187 78872 89999 60403  |
| 21st/28th             |               |                          | '427' 580 6 95225 84090 09531 88430 33240 61135  |
| 7th/14th              | 1100/1110z    | 6190/7230                | '265' 903 7 88728 34956 99271 37454 11886 55522 94481                                  |
| 21st/28th             |               |                          | <b>.</b> '265' 491 7 36755 31446 34476 91326 41043                                     |
| *** 1                 |               |                          |  |
| Wednesday             | 0830/0840z    | 0002/0052                | (4/4) 272 5 42247 22220 40000 2/470 20012  |
| 1st/8th               | 0830/0840Z    | 9082/9952                | '464' 273 5 43247 32329 48080 36478 39013  |
| 15th/22nd<br>1st/8th  | 1000/1010z    | 13365/14505              | '464' 239 5 32993 32539 38408 36364 36982<br>'276' 439 5 83208 37829 47458 42867 39654 |
| 15th/22nd             | 1000/1010Z    | 15505/14505              | 276 439 3 83208 37829 47438 42807 39034<br>'276' 891 5 37331 38881 37914 30303 74862   |
| 13th/22ftd            |               |                          | 2/0 691 3 3/331 38881 3/914 30303 /4802  |
| Thursday              |               |                          |  |
| 2nd/9th               | 0730/0740     | 11530/12140              | 172° 435 6 33796 13577 74526 46647 79302 53516   |
| 16th/23rd             |               |                          | 172' 906 5 33584 40485 46170 43306 37796   |
| 2nd/9th (E17z)        | 0800/0810z    | 14260/12930              | '217' 460 5 52401 48754 65125 41879 84648  |
| 16th/23rd             |               |                          | '217' 409 5 37184 36129 33983 83321 85426  |
|                       |               |                          |  |

| 2nd/9th<br>16th/23rd | 0930/0940z | 9081/10514  | '698' 203 5 50128 99477 83574 48874 94031<br>'698' 217 5 43798 46937 33032 38334 4613 |
|----------------------|------------|-------------|---|
| 2nd/9th              | 1200/1210z | 12415/14212 | '175' 849 6 54545 50128 99477 83574 48874 94031                                       |
| 16th/23rd            |            |             | 175, 934 6 42990 33000 32968 35332 36880 33582  |
| Friday               |            |             |   |
| 3rd/10th             | 0830/0840z | 12140/13515 | 156, 234 7 99183 29227 75604 14597 71729 24331 55521°                                 |
| 17th/24th            |            |             | '156' 893 7 81235 32469 33311 37672 86212 48808 34237                                 |
| 3rd/10th             | 0900/0910z | 5744/6524   | '239' 807 5 45393 85461 81365 22047 68432   |
| 17th/24th            |            |             | <sup>239</sup> , 801 5 32546 33766 37399 32148 35819                                  |
| Saturday             |            |             |   |
| 4th                  | 0800/0810z | 10350/8520  | '132' 946 5 65806 66610 20336 17301 88554   |
|                      |            |             |   |

### S06 log Oct 2021

| Thursday | s (Repeats Friday)  | 0830z       | 20312kHz          | 0930z         | 16237kHz   |
|----------|---|-------------|-------------------|---------------|--|
| 07/10    | '842' 970 38 66832 22030 43822 98229 <del>(</del>   | 4671 69661  | 87353 08696 50618 | 15428 36098   | 3 50704 45751 84816 92950 91054 60668 88788 77637 27967  |
|          | 59389 87082 61965 61069   | 18061 25435 | 74694 09533 84366 | 5 76422 24484 | 4 20535 88608 38600 14340 35249 42381 73629 970 38 00000   |
| 14/10    | '842' 156 39 98425 73566 90597 33784 I  | 1817 57291  | 10151 71642 88820 | 67096 64274   | 23514 33273 08865 40857 96208 01010 45730 00368 91060  |
|          | 68704 86033 84388 90377<br>00000  | 94837 31927 | 27382 59994 51238 | 3 30804 82606 | 5 22633 08620 96759 98142 81748 74565 94244 03941 156 39   |
| 21/10    |   | 0 0 0 0 0 0 |                   |               | 5 20146 83156 88638 25138 62880 01762 41777 68640 55668<br>1 19981 68177 73352 98618 39133 23661 36379 76853 21108 |
| 28/10    | 0 |             |                   |               | 1 89306 99947 63276 30455 43662 44437 87844 56765 56928<br>7 39301 45255 12490 19886 57529 96853 12895 34649 98453 |

| Fridays | (1st & 3rd)        | 1900z | 9056khz | 2000z | 6825kHz |
|---------|--------------------|-------|---------|-------|---------|
| 01/10   | '768' 00000        |       |         |       |         |
| 15/10   | <b>'768'</b> 00000 |       |         |       |         |

| Other: | 1615z | 8043kHz |
|--------|-------|---------|

54112 560 41 00000

409' 863 51 19002 60242 04492 38568 11013 98118 55926 70756 70754 09478 69261 86426 25626 24175 33003 99279 74978 68129 97617 41017 06/10 49158 27328 39317 99023 91707 27565 02463 47125 06891 40820 75262 42850 39743 54258 78466 89626 80825 62744 71729 87367

12870 70842 07343 19860 41518 15221 86009 52422 77314 43410 94369 863 51 00000 (Thanks Ary)

13364kHz 1300z 11408kHz 1200z 6579° 421 60 39282 96224 60892 70829 12713 04137 01420 64131 61763 08102 44778 48519 71180 40139 67408 63097 96026 48256 48140 70254 26/10  $64429\ 29059\ 24513\ 05998\ 73013\ 23543\ 65984\ 14769\ 04690\ 24854\ 06229\ 79651\ 23500\ 71239\ 01695\ 83948\ 26195\ 22705\ 08631\ 65025$ 55244 44793 95747 46386 02955 47937 34713 58909 61390 55810 35671 87180 97781 01125 19966 01855 60109 72301 47256 17524 421 60 00000

| S06s Oct log: |            |              |  |
|---------------|------------|--------------|--|
| Monday        |            |              |  |
| 4th/11th      | 0630/0640z | 22185/20050  | '462' 538 7 14600 64248 48274 60125 41879 84648 42036      |
| 18th/25th     |            |              | '462' 530 7 76605 94742 26434 31212 09218 48900 71724      |
| 4th/11th      | 0830/0840z | 9220/8270    | '764' 821 5 34140 78386 91497 82963 24162                  |
| 18th/25th     |            |              | '764' 893 5 50298 13621 61881 99183 21015                  |
| 4th/11th      | 0900/0910z | 14580/13165  | '232' 408 5 23246 16099 94961 35825 65906                  |
| 18th/25th     |            |              | '232' 871 5 75537 57440 23278 15945 06123                  |
| 4th/11th      | 1200/1210z | 9145/11460   | 149 <sup>,</sup> 803 5 45032 29366 87471 21487 30120       |
| 18th/25th     |            |              | 149 <sup>,</sup> 532 6 46062 68672 97478 39685 30485 96632 |
|               |            |              |  |
| Tuesday       |            |              |  |
| 5th/12th      | 0600/0610z | 158555/16485 | '438' 217 5 22147 32420 21521 27221 35686                  |
| 19th/26th     |            |              | '438' 921 5 52401 63919 92699 14600 74248                  |
| 5th/12th      | 0700/0710z | 5760/6930    | '452' 893 6 21767 53672 11834 81022 36903 41412            |
| 19th/26th     |            |              | '452' 836 7 39268 42352 38713 30699 54426 44024 21272      |
| 5th/12th      | 0730/0740z | 7425/11560   | '427' 961 5 33796 13577 74526 46647 79302                  |
| 19th/26th     |            |              | '427' 893 5 33241 22420 32545 27131 25786                  |
| 5th/12th      | 0800/0810z | 11635/10420  | 127 <sup>,</sup> 934 5 44024 31373 35876 35436 33023       |
| 19th/26th     |            |              | 127° 836 5 90406 26112 23307 27806 27237                   |
| 5th/12th      | 1000/1010z | 6410/7340    | '427' 893 5 45032 39366 87471 31487 40130                  |
| 19th/26th     |            |              | '427' 961 5 82024 08127 51012 43764 50120                  |
| 5th/12th      | 1100/1110z | 6190/7230    | '265' 907 8 44365 43025 39238 33578 47568 40573 31479 3553 |
| 19th/26th     |            |              | '265' 931 7 90577 83175 42776 18193 18204 58834 42663      |
|               |            |              |  |

| Wednesday       |            |             |   |
|-----------------|------------|-------------|---|
| 6th/13th        | 0830/0840z | 9082/9952   | '464' 832 7 90406 36113 31107 37806 37137 31405 46464 |
| 20th/27th       |            |             | '464' 230 5 61881 70151 56499 37086 11887             |
| 6th/13th        | 1000/1010z | 13365/14505 | '276' 893 5 50458 34605 02105 79322 74220             |
| 20th/27th       |            |             | '276' 401 5 06376 48057 13361 19474 34978             |
|                 |            |             |   |
| Thursday        |            |             |   |
| 7th/14th        | 0730/0740  | 11530/12140 | 172' 450 6 79302 52516 24616 56069 98812 24199        |
| 21st/28th       |            |             | 172' 459 6 62573 40032 93748 34064 46688 49873        |
| 7th/14th (E17z) | 0800/0810z | 14260/12930 | '217' 468 5 88620 58069 77632 67543 57440             |
| 21st/28th       |            |             | '217' 840 5 05573 41987 95692 83209 69817             |
| 7th/14th        | 0930/0940z | 9081/10514  | 698' 207 5 92405 25003 23456 60582 44476              |
| 21st/28th       |            |             | 698' 230 5 08631 58082 82789 16094 29043              |
| 7th/14th        | 1200/1210z | 12415/14212 | 175, 492 5 22272 64385 82606 05234 33526              |
| 21st/28th       |            |             | '175' 493 6 64649 41127 95693 74263 98721 70076       |
|                 |            |             |   |
| Friday          |            |             |   |
| 1st/8th         | 0830/0840z | 12140/13515 | 156' 249 7 88620 58069 61723 74538 57440 20498 25616  |
| 15th/22nd       |            |             | 156' 409 7 90577 83175 42776 18193 18204 58837 42663  |
| 1st/8th         | 0900/0910z | 5744/6524   | '239' 401 5 33796 12477 74527 46627 69202             |
| 15th/22nd       |            |             | <b>.</b> 239, 408 5 80331 17613 74220 56381 16458     |
| Saturday        |            |             |   |
| 2nd             | 0800/0810z | 10350/8520  | 132, 440 2 46062 68642 34448 39682 30482              |

### Peter, PoSW sends in comprehensive logs of this Russian station:

### S06, OM Voice:-

### First + Third Fridays in the Month Schedule:-

3-Sept-21:- 1900 UTC, 9056 kHz, "768 768 768 00000", weak signal.

2000 UTC, 6820 kHz, much stronger, peaking over S9. Similar frequencies to those used in the springtime.

17-Sept-21:- 1900 UTC, 9056 kHz, "768 768 768 00000", S6 to S7.

2000 UTC, 6825 kHz, peaking over S9 on one of the frequencies favoured by the French CW station; very weak CW heard after S06 carrier had gone off.

Not entirely unexpectedly this schedule moved up an hour in October:-

 $1\text{-Oct-}21\text{:-}\ 2000\ UTC,\ 9056\ kHz,\ "768\ 768\ 768\ 00000",\ strong\ signal,\ peaking\ over\ S9.$ 

2100 UTC, 6825 kHz, S9 with QSB, no French CW.

15-Oct-21:- 2000 UTC, 9056 kHz, "768 768 768 00000", S6 to S7.

2100 UTC, 6825 kHz, S5 to S6 at best, weaker by 2103 UTC.

### Other S06 Heard:-

26-Oct-21, Tuesday:- 1409 UTC, 18284 kHz, surprised to find the Russian Man in full flow while casually tuning around and not really expecting to find anything of interest. Good signal, final few minutes of a transmission, last 5Fs "79582 27120 47131" ending with, "716 716 43 43 00000".

#### S06s, YL Voice:-

Some of the stronger S06s transmissions heard during the last two months; several weaker ones which would probably have been perfectly readable had it not been for the high levels of local RF noise interference.

### Monday 0830 + 0840 UTC Schedule, Call "764":-

6-Sept-21:-0830 UTC, 9220 kHz, DK/GC "915 915 8 8", a higher group count than most, not at all strong, sank into noise, came up towards the end in time to hear "...56970 32453" and the ending routine.

0840 UTC, 8270 kHz, much stronger, "83830 93731 58291 64212 67195 31960 56970 32453".

20-Sept-21:- 0830 UTC, 9220 kHz, very weak, unreadable. Second sending stronger:-

0840 UTC, 8270 kHz, DK/GC "231 231 5 5", "40614 77249 40678 17976 21816".

27-Sept-21:-0830 UTC, 9220 kHz, very weak as usual, could just hear the "764" call.

0840 UTC, 8270 kHz, much stronger, peaking a good S9, "231 231 5 5" and 5Fs as on the 20th.

25-Oct-21:- 0830 UTC, 9220 kHz, DK/GC "893 893 5 5", just about readable, 9 MHz is one of the parts of the short-wave spectrum where local RF noise interference is intense,

"50298 13621 61881 99183 21015".

0840 UTC, 8270 kHz, much better copy, S8 and local QRM considerably lower.

#### Tuesday 0730 UTC + 0740 UTC Schedule, Call "427":-

7-Sept-21:- 0730 UTC, 7425 kHz, DK/GC "590 590 6 6", good signal, "06376 48054 13361 19474 34978 38865".

0740 UTC, 11560 kHz, strong, peaking over S9.

21-Sept-21:- 0730 UTC, 7425 kHz, very weak, unreadable.

0740 UTC, 11560 kHz, much stronger, DK/GC "903 903 5 5", "11161 64385 82707 06123 22546".

5-Oct-21:- 0730 UTC, 7425 kHz, strong signal, well over S9, DK/GC "961 961 5 5", "33796 13577 74526 46647 79302".

0740 UTC, 11560 kHz, very strong.

19-Oct-21:- 0730 UTC, 7425 kHz, DK/GC "893 893 5 5", strong, "33241 22420 32545 27131 25786".

0740 UTC, 11560 kHz, also strong.

#### Wednesday 1000 + 1010 UTC Schedule, Call "276":-

1-Sept-21:- 1000 UTC, 13365 kHz, DK/GC "439 439 5 5", very strong signal, DK/GC "439 439 5 5", "83208 37829 47458 42867 39654".

1010 UTC, also very strong.

8-Sept-21:-1000 UTC, 13365 kHz, "439 439 5 5" and 5Fs as on the 1st, S8.

1010 UTC, 14505 kHz, weaker.

22-Sept-21:- 1000 UTC, 13365 kHz, DK/GC "891 891 5 5", "37331 38881 37914 30303 74862", S7 with deep fading.

1010 UTC, 14505 kHz, also S7 with fading up and down.

6-Oct-21:- 1000 UTC, 13365 kHz, DK/GC "893 893 5 5", S5 at best, "50458 34605 02105 79322 74220".

1010 UTC, 14505 kHz, stronger.

13-Oct-21:- 1000 UTC, 13365 kHz, "893 893 5 5" and 5Fs as on the 6th, weak signal.

1010 UTC, 14505 kHz, signal up and down from around S7 to barely readable.

27-Oct-21:- 1000 UTC, 13365 kHz, DK/GC "401 401 5 5", strong signal, well over S9,

 $"06376\ 48057\ 13361\ 19474\ 34978".$ 

1010 UTC, 14505 kHz, slightly weaker.

### Friday 0830 + 0840 UTC Schedule, Call "156":-

3-Sept-21:- 0830 UTC, 12140 kHz, DK/GC "234 234 7 7", very strong signal, "99183 29227

75604 14597 71729 24331 55521".

0840 UTC, 13515 kHz, also very strong.

10-Sept-21:- 0830 UTC, 12140 kHz, "234 234 7 7" and 5Fs as on 3-Sept. S8 to S9.

0840 UTC, 13515 kHz, weaker.

1-Oct-21:- 0830 UTC, 12140 kHz, DK/GC "249 249 7 7", over S9, "88620 58069 61723 74538 57440 20498 25616".

0840 UTC, 13515 kHz, S9+, very strong signal.

8-Oct-21:- 0830 UTC, 12140 kHz, DK/GC "249 249 7 7", and 5Fs as on 1-Oct. Very strong signal.

0840 UTC, 13515 kHz, also very strong.

15-Oct-21:- 0830 UTC, 12140 kHz, DK/GC "409 409 7 7", "90577 83175 42776 18193 18204 58837 42663". Around the 7 on the S-meter.

0840 UTC, 13515 kHz, weak, difficult copy, interference from the rapidly sweeping carrier that resides around this frequency.

29-Oct-21:- 0830 UTC, 12140 kHz, "156 156 00000", very strong signal, fifth Friday in the month means "no message".

0839 UTC, 13515 kHz, early start for the second sending of no message, strong signal.

### S11a log Sept/Oct

| 6433kHz | 0830z | 04/09 [371/00] Konyetz 0833z S3            | Malc, HfD  | SAT |
|---------|-------|--|------------|-----|
|         | 0830z | 05/09 [378/00] Konyetz 0833z S3            | Malc       | SUN |
|         | 0830z | 11/09 [371/37 3945349011] Konyetz 0842z S4 | Malc       | SAT |
|         | 0830z | 12/09 [371/37 39453etc] Repeat of Saturday | Malc       | SUN |
|         | 0830z | 19/09 [371/00]                             | RNGB       | SUN |
|         | 0830z | 25/09 [373/00] Konyetz 0833z S5            | Malc       | SAT |
|         | 0830z | 26/09 [373/00] Konyetz 0833z S7            | Malc       | SUN |
|         | 0830z | 02/10 [373/00]                             | RNGB       | SAT |
|         | 0830z | 09/10 [376/00] Konyetz 0833z S7            | Malc       | SAT |
|         | 0830z | 10/10 [371/00] Konyetz 0833z S4            | Malc       | SUN |
|         | 0830z | 16/10 [378/31 4386489254] Konyetz 0841z S4 | Malc       | SAT |
|         | 0830z | 17/10 [378/31 43864etc]                    | Malc       | SUN |
|         | 0830z | 23/10 [376/00] Konyetz 0833z S3            | Malc       | SAT |
|         | 0830z | 30/10 [376/00] Konyetz 0833z S3            | Malc, RNGB | SAT |
|         | 0830z | 31/10 [376/00] Konyetz 0833z S4 M8 SUN     |            |     |

| 6480kHz   | 09157 | 03/09 [484/00] Konyetz 0918z S2+QRM  | Malc, HfD   | FRI |
|-----------|-------|--|-------------|-----|
| OHOOKIIZ  | 0915z | 06/09 [487/00] Konyetz 0918z S2  | Malc        | MON |
|           | 0915z | 10/09 [484/00] Konyetz 0918z S4+QRM  | Malc        | FRI |
|           | 0915z | 13/09 [481/36 2610654423] Konyetz 0926z S3 (Dutch SDR)                               | Malc        | MON |
|           | 0915z | 20/09 [487/00]   | RNGB        | MON |
|           | 0915z | 24/09 [484/00] Konyetz 0918z S2  | Malc        | FRI |
|           | 0915z | 27/09 [485/00] Konyetz 0918z S2+QRM  | Malc        | MON |
|           | 0915z | 04/10 [487/00] Konyetz 0918z S3  | Malc        | MON |
|           | 0915z | 11/10 [488/35 21500 74502 49136 92321 30298 81000 6377389478 61333] Konyetz 0926z    | RNGB, Malc  | MON |
|           | 0915z | 15/10 [486/35 21500etc] Repeat of Monday   | Malc        | FRI |
|           | 0915z | 18/10 [484/00] Konyetz 0918z S3  | Malc, RNGB  | MON |
|           | 0915z | 22/10 [481/00] Konyetz 0918z S3  | Malc, RNGB  | FRI |
|           | 0915z | 25/10 [484/00] Konyetz 0918z S5  | Malc        | MON |
|           | 0915z | 29/10 [481/00] Konyetz 0918z S3+QRM  | Malc        |     |
|           |       |  |             |     |
| 8088kHz   |       | 03/09 [429/00]   | Ary         | FRI |
|           | 1020z | 07/09 [422/37 0244138418] Konyetz 1031z S3   | Malc, HfD   | TUE |
|           | 1020z | 10/09 [422/37 02441etc] Repeat of Tuesday  | Malc        | FRI |
|           | 1020z | 21/09 [427/00] Konyetz 1023z S3  | Malc        | TUE |
|           | 1020z | 24/09 [426/00] Konyetz 1023z S2  | Malc        | FRI |
|           | 1020z | 28/09 [427/00] Konyetz 1023z S3  | Malc        | TUE |
|           | 1020z | 05/10 [420/00] Konyetz 1023z S2  | Malc        | TUE |
|           | 1020z | 12/10 [424/39 1995998822] Konyetz 1032z S4   | Malc        | TUE |
|           | 1020z | 19/10 [429/00] Konyetz 1023z S4  | Malc        | TUE |
|           | 1020z | 22/10 [426/00] Konyetz 1023z S3  | Malc        | FRI |
|           | 1020z | 26/10 [420/00] Konyetz 1023z S3  | Malc        | TUE |
|           | 1020z | 29/10 [420/00] Konyetz 1023z S2  | Malc        | FRI |
| 8597kHz   | 0700z | 02/09 [471/00] Konyetz 0703z S3  | Malc, HfD   | THU |
|           | 0700z | 06/09 [470/00] Konyetz 0703z S3  | Malc, RNGB  | MON |
|           | 0700z | 09/09 [478/00] Konyetz 0703z S2  | Malc, RNGB  | THU |
|           | 0700z | 13/09 [471/34 42286 41415 40965 83901 51684 53200 3182500770 85590] Konyetz 0711z    | RNGB, Malc  | MON |
|           | 0700z | 16/09 [471/34 42286etc] Repeat of Monday   | RNGB        | THU |
|           | 0700z | 20/09 [476/00]   | RNGB        | MON |
|           | 0700z | 23/09 [471/00] Konyetz 0703z S2  | Malc        | THU |
|           | 0700z | 27/09 [475/00] Konyetz 0703z S4  | Malc        | MON |
|           | 0700z | 30/09 [475/00] Konyetz 0703z S5  | Malc        | THU |
|           | 0700z | 04/10 [477/38 68952 46812 47304 21713 99458 17512 9948660237 29705] Konyetz 0718z S2 | RNGB, Malc  | MON |
|           | 0700z | 07/10 [477/38 68952etc] Repeat of Monday   | Malc        | THU |
|           | 0700z | 11/10 [475/00] Konyetz 0703z S5  | Malc        | MON |
|           | 0700z | 14/10 [478/00] Out 0703z S3  | Malc, RNGB  | THU |
|           | 0700z | 18/10 [475/00] Konyetz 0703z S2  | Malc, RNGB  | MON |
|           | 0700z | 25/10 [476/00] Konyetz 0703z S6  | Malc        | MON |
|           | 0700z | 28/10 [470/00] Konyetz 0703z S4  | Malc, RNGB  | THU |
| 10213kHz  | 18507 | 01/09 [284/00] Konyetz 1853z S9  | Malc, HfD   | WED |
| 1021JK11Z | 1850z | 04/09 [286/00] Konyetz 1853z S9  | Malc Malc   | SAT |
|           | 1850z | 08/09 [285/39 1969129564] Konyetz 1902z S7   | Malc        | WED |
|           | 1850z | 11/09 [285/39 1969129564] Konyetz 1902z S3   | Malc        | SAT |
|           | 1850z | 15/09 [286/00] Konyetz 1853z S9  | Malc        | WED |
|           | 1850z | 22/09 [287/00] Konyetz 1853z S3  | Malc        | WED |
|           | 1850z | 29/09 [480/00] Konyetz 1853z S9  | Malc        | WED |
|           | 1850z | 06/10 [280/33 2815863316] Konyetz 1901z S3   | Malc        | WED |
|           | 1850z | 09/10 [280/33 28158etc] Repeat of Wednesday  | Malc        | SAT |
|           | 1850z | 13/10 [285/00] Konyetz 1853z S9  | Malc        | WED |
|           | 1850z | 23/10 [281/00] Konyetz 1853z S2 (Dutch SDR)  | Malc        | SAT |
|           | 1850z | 27/10 [287/00] Konyetz 1853z S2+QRM  | Malc        | WED |
|           | 1850z | 30/10 [284/00] Konyetz 1853z S6  | Malc        | SAT |
|           |       |  | <del></del> | ~   |
| 11116kHz  | 0510z | 18/10 [656/31 27803etc]  | HfD         | MON |
| 14769kHz  | 0500z | 07/09 [383/00]   | HfD         | TUE |



### Heard from Moscow [See Editorial/Intros/ZAPAD-21]:

9283kHz1015z 27/09 367 1 5336 9 73674 ... 88622 000 000 367 367 367 367 367 1 5336 9 5336 9 73674 08169 14370 81763 33171 30774 94758 23586 88622 000 000 Courtesy Ary

[From Moscow]

Ary

MON

### Sunday

### September 2021

| 0100z 13535kH   | Iz 0120z   | 12135kHz               | 0140z       | 11135kHz  |              |      |
|---|--|------------------------|-------------|-----------|--------------|------|
| 05/09<br>415 415 415 1<br>399 44<br>67332 10026 62752 52934<br>80179 91657 81832 41109<br>33706 51736 32611 42672<br>88052 21270 36006 67086<br>46570 68265 72798 22325<br>90424 82563 46723 88754<br>98752 53103 75850 86702<br>17839 60604 95247 30970<br>05275 15590 05311 46709<br>000 000 Courtesy PLdn  | 36893<br>52818<br>30523<br>18384<br>12310<br>84255<br>28787  | 46709 000 000          | [0100z S.   | DR Japan] | Weak         |      |
| 19/09   | 511 1 228 124 03329  | 9 - 31388 000 000      | [0100z S    | DR Japan] | Weak, QSB3   |      |
| 26/09 511 511 511 1 626 210 56586 67001 97793 46759 46780 20176 45285 73497 81794 72468 78222 36781 76057 86048 75771 09429 93423 26503 58362 14189 76767 25718 95679 04931 25901 24161 83139 36114 19652 46786 67831 19611 94774 12210 45253 92892 11687 59134 03197 58509 57741 24756 55773 83839 20678 07961 74677 94063 42871 70595 14619 66789 69729 84296 65984 59675 25837 00534 27753 44943 31042 90329 24722 57334 22738 52786 53764 64801 24787 3787 84948 31042 90329 24722 57334 22738 52786 53764 64801 39777 81948 22082 81991 26970 30654 50157 97124 05848 72419 32162 36148 00074 72183 61034 07044 41513 82018 91582 66797 82827 87528 79332 63489 17157 65481 49590 01068 45290 84757 56788 51128 29309 65911 58755 83961 12871 36603 03411 25954 37641 36163 20848 34331 70023 338402 52706 08657 81287 67273 23260 66896 30080 52132 16957 19578 77800 26300 14332 93661 81885 43885 54812 41706 44522 51974 56491 40588 95919 62901 48418 98407 04078 91749 82374 16901 71930 32863 14302 15236 89323 14149 79727 13681 98080 64811 24930 59669 02407 33580 94071 80209 12525 07877 07070 92744 000 000 | 50820 00375 51023 91369 99506 53959 00311 40831 909028 46295 57672 999725 64868 86245 600796 13536 05447 73537 79287 62542 22612 79850 72268 18501 46368 80658 90665 39106 18014 68369 26720 51354 03816 98812 87615 29921 92244 41309 04803 30886 74543 | 6 74543 000 000        | [0100z S.   | DR Japan] | Strong       |      |
| Friday message: A   | ry comments The shor   | rtest message ever :-) | See Editori | al        |              |      |
| 7649kHz1605z  | 01/10 367 367 367 1  | 7712 1 7712 1 02956    | 000 000     |           | Ary          | FRI  |
| 0100z 15925kH   | Iz 0120z   | 14725kHz               | 0140z       | 13425kHz  |              |      |
| 03/10   | 974 1 7422 88 9949   | 7 15735 000 000        |             |           | [0100z QSB1] | Weak |
| 974 974 974 1 7422 88 99497 00426 14368 50502 26480 98695 44643 55832 72477 97057 37643 37923 64973 79679 18246 13438 05568 96570 80635 41329 29800 74886 28621 81690 55384 46516 45240 41286 34214 75219 04166 09366 66383 51414 40603 89229 52093 81752 58904 51762 26759 42932 61795 09590 51298 28170 88041 79966 40775 66000 93675 83198 86185 63532 90404 35087 48710 98997 28290 73072 20223 30442 65371 89535 02449 38205 26519 70498 81484 92449 15735 000 00 Courtesy I   | 82487<br>36841<br>63436<br>16757<br>94067<br>33679<br>17406<br>87807<br>86295<br>73115<br>71615<br>04294<br>82729<br>59928<br>16929<br>52127   |                        |             |           |              |      |

```
10/10
                                          974 1 598 86 70444 ... 10835 000 000
                                                                                                                                                                                                                                                                  Weak
974 974 974 1
598 86
70444 02192 81893 43342 68910
70444 02192 81893 43342 68910
89144 72729 49350 11888 34272
83108 61997 73901 54175 34838
30604 97489 67503 96736 05394
41500 38194 38572 69604 69396
41500 38194 385/2 69604 69396
59577 05003 81658 22873 00648
14353 87622 38979 18721 19008
28611 81847 74835 37636 80271
40924 63608 99060 62397 21994
98608 88529 06141 97768 65961
31440 95190 03138 87142 94998
28699 91542 54949 67472 32820
86370 81536 12865 55536 29321
64896 65060 51155 00275 89394
44075 16558 01017 51486 48150
62152 99264 71347 16386 10195
18250 29114 99466 92437 23070
10835 000 000 Courtesy DanAR
17/10
                                           974 1 246 178 37909 ... 30554 000 000
                                                                                                                                                                                                                                                                  Weak
                                           Due to the long message the 14 and 13 mhz slots started ~ 11 minutes delayed.
974 974 974 1
246 178
37909 09593 40788 41304 53639
41499 35841 38880 37924 92093
01826 45373 79713 49628 91897
78228 54716 20412 83508 56206
84543 73290 19287 00491 02781
69617 36245 07783 44129 74085
98562 38978 45432 40364 03727
91263 17209 87681 13534 46675
28551 89714 47893 95880 92907
44638 44809 69197 84055 36560
29060 65439 65401 55777 41717
71372 65600 25785 76547 97939
08902 27175 20175 04714 65958
47629 05978 40198 27043 96717
27506 09446 35186 79623 08814
16514 98130 88503 03560 77316
22166 30982 41852 38323 86001
73574 14311 07570 01283 53531
21268 03855 72282 26637 05486
74448 17519 95126 51070 35136
58937 27046 86315 75858 73694
69010 27337 86502 27113 26629
75445 08455 94561 76504 12692
11340 54795 00678 45050 38744
40990 65289 25106 61490 27866
12178 84660 59921 55563 61571
65820 46862 55096 22475 67767
64314 96110 24177 28455 75907
02426 97478 82120 00253 24655
44212 30418 90068 26818 88766
22121 93794 11215 76783 19439
90263 17908 95620 86723 09422
60605 19729 02985 55716 11456
31149 54315 83485 46387 55711
02595 30651 53494 28291 07815
20506 27977 30554 000 000
                       Courtesy DanAR
24/10
                                          974 1 784 182 21170 ... 73548 000 000
                                                                                                                                                                                                                                                                  Weak, QSB1
                                                                                                                                 [0100z Only]
974 974 974 1
784 182
21170 74134 60459 81725 40969
```

13437 38004 73635 58357 87759 08081 73548 000 000 Courtesy DanAR

<u>V13</u>

Nil Reports

<u>V26</u>

Nil Reports

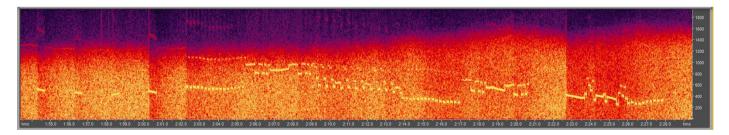
## **Polytones**

## XPA1 c

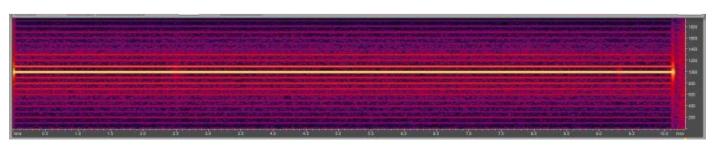
Tuesday/Thursday

September 2021

| 0710z | 10682kHz | 0730z         | 11571kHz       | 0750z | 12216kHz                     |                |
|-------|----------|---------------|----------------|-------|------------------------------|----------------|
| 02/09 | 761 0    | 00 05156 0000 | 01 00000 34662 |       | [0710z MISSED]               | Fair           |
| 07/09 | 761 0    | 00 07426 0000 | 01 00000 36261 |       | [0710z very poor, see image] | Fair to strong |



Apparent transmitter/master oscillator problems with 0710z sending 07/09/2021. Rx checked against stable oscillator source – when receiving mode set to special AM with carrier being injected. No lock achieved. [Dumbo]! My fault, not theirs!



10682kHz test transmission via  $50\Omega$  Dummy load [1kHz tone] Satisfactory response

|   | 09/09   | 761 000 02586 00001 | 1 00000 36662      |               |                     |  | Strong        |  |  |  |
|---|---|---------------------|--------------------|---------------|---------------------|--|---------------|--|--|--|
|   | 14/09   | 761 000 05639 00001 | 1 00000 40660      |               |                     |  | Weak          |  |  |  |
|   | 16/09   | 761 000 04463 00001 | 1 00000 34662      |               | [0710z Only]        |  | Weak          |  |  |  |
|   | 21/09   | 761 000 06981 00001 | 1 00000 36266      |               | [0710z Fair]        |  | Weak          |  |  |  |
|   | 23/09   | 761 000 04508 00001 | 1 00000 37654      |               | [0710z Unworkable]  |  | Weak          |  |  |  |
|   | 28/09   | 761 1 00644 00113 3 | 4759 11012         |               | [0750z Strong]      |  | Fair          |  |  |  |
|   | 761 761 761 1 761 761 761   | 1 761 761 761 1     |                    |               |                     |  |               |  |  |  |
| 00644 00113 34759 11135 09038 23264 45347 80234 25539 34959 89591 87735 04745 79313 97891 73368 29628 17194 03698 89392 37518 20177 16441 32597 76796 25407 05106 21300 61607 07772 48700 33705 04996 67544 60977 12325 31794 97013 09313 00410 04522 52683 42518 71401 33485 07379 86657 55408 90282 13724 64457 68199 44839 19053 21089 28791 08567 05369 11615 76574 71267 00073 01562 98234 |   |                     |                    |               |                     |  |               |  |  |  |
| 48846 25055 72480 48534 88479 41139 54951 57216 00671 92992 70061 73695 87737 55794 36655 56498 94108 36365 33823 06260 85238 74407 35175 34796 56047 99841 36129 93160 84044 25699 15566 25854 63175 24915 52499 21251 71320 94871 66395 56730 83449 80649 87658 36865 75753 96455 94966 05901 37689 89847 41455 11012 Courtesy PLdn   |   |                     |                    |               |                     |  |               |  |  |  |
|   | 30/09   | 761 1 00644 00113 3 | 4759 11012         |               | [0750z Very strong] |  | Strong        |  |  |  |
|   | October 2021  |                     |                    |               |                     |  |               |  |  |  |
|   | 0710z 12167kHz  | 0730z               | 13437kHz           | 0750z         | 14972kHz            |  |               |  |  |  |
|   | 05/10   | 249 1 00266 00065 3 | 9935 63554         |               | [0750z Strong]      |  | Fair          |  |  |  |
|   | 249 249 249 1 249 249 249 1   | 1 249 249 249 1     |                    |               |                     |  |               |  |  |  |
|   | 00266 00065 39935 65920 71778 19835 01610 57593 29147 51755 24357 71813 65097 27103 81080 57108 38701 01941 26166 17632 55379 34464 42439 68210 64594 76086 77660 85960 48895 79996 80359 23596 02782 47872 79258 82738 44355 17976 38413 12755 98717 58630 92579 68491 98786 35550 78180 27396 74134 44006 55567 89084 87970 09895 85576 27755 71746 77494 23375 21882 67979 43271 64157 90220 |                     |                    |               |                     |  |               |  |  |  |
|   | 63178 23620 22206 63554   | Courte              | esy PLdn           |               |                     |  |               |  |  |  |
|   | 07/10   | 249 1 00266 00065 3 | 9935 63554         |               | [0750z Weak]        |  | Strong        |  |  |  |
|   | 12/10   | NRH across schedule | e poor condx follo | wing Solar Fl | are [M Class]       |  |               |  |  |  |
| 14/10 249 1 00266 00065 39935 63554   |   |                     |                    |               |                     |  |               |  |  |  |
|   | 19/10   | 249 1 00390 00153 4 | 6136 60436         |               | [0750z QSB4]        |  | Weak          |  |  |  |
|   | 21/10   | 249 1 00390 00153 4 | 6136 60436         |               | [0710z Strong]      |  | Weak          |  |  |  |
|   | 249 249 249 1 249 249 249 1   | 1 249 249 249 1     |                    |               |                     |  |               |  |  |  |
| 00390 00153 46136 67113 75433 81368 21547 96490 30589 66199 77891 52092 85045 21062 83486 43083 81631 68344 17728 72718 07251 51127 42564 37938 35700 30262 16584 87858 99872 64133 14449 96585 44179 34152 04336 63989 52199 75315 69758 12832 12914 03486 32943 51805 70832 40538 24624 65884 00943 58226 85112 00111 23243 12177 62530 83127 25926 99151 73022 17930 91946 67392 84536 78083 |   |                     |                    |               |                     |  |               |  |  |  |
| 18477 93185 85432 80338 42583 60841 54052 39767 15086 16092 96536 09547 51115 59035 79374 56653 47005 86299 87004 02713 71931 19466 03748 61256 81103 19279 22766 11634 88478 2010 27253 81286 49056 77894 43083 44556 96434 15451 70540 09165 64325 92168 83241 60480 61805 87618 70802 20733 64093 17380 25868 17349 13531 99662 50072 71981 70117 88004 42313 62272 83198 25301 36072 91182  |   |                     |                    |               |                     |  |               |  |  |  |
|   |   |                     |                    |               |                     |  |               |  |  |  |
|   |   |                     | tesy PLdn          |               |                     |  |               |  |  |  |
|   | 26/10   |                     | •                  |               |                     |  | Strong        |  |  |  |
|   | 26/10<br>28/10  | Cour                | 6136 60436         |               | [0710zStrong]       |  | Strong<br>Fai |  |  |  |

## XPA1 Wed/Fri

### Wednesday/Friday

### September 2021

| 1210z  | 12137kHz  | 1230z   | 11137kHz  | 1250z | 10237kHz                       | [fm A           | ary/H-FD with thanks] |  |  |
|--|---|---|---|-------|--------------------------------|-----------------|-----------------------|--|--|
| 01/09  | 11  | 2 1 00204 00100 7   | 0867 73513  |       |                                | Ary             | WED                   |  |  |
| 00204 0010<br>05054 9077<br>90882 4584<br>16881 5242<br>73322 0928<br>65120 3501<br>45988 9406<br>64655 7777<br>06314 9622 | 25 06513 03462 8603<br>28 04504 63531 6705<br>26 49069 76910 9667<br>26 60344 15556 1511<br>27 92 27982 74667 7197<br>29 44754 39310 5478<br>26 89031 98376 0648<br>28 35246 79224 0350<br>21 92602 74153 20216 | 7 8478 7 1272 97056 290<br>7 10213 20708 90792 155<br>7 10213 20708 90792 155<br>7 10213 20708 90792 155<br>7 10213 20708 90792 155<br>7 10213 20708 112<br>7 10213 20708 112<br>8 1724 3 1815 2 5504 412<br>8 1726 90099 49282 048<br>6 4396 5 7703 4 3646 927<br>1 17144 6 764 6 43419 142<br>1 2 4697 8 1000 6 3478 2 31 | 569 45110<br>801 24362<br>626 75912<br>87 82548<br>668 79054<br>939 71084<br>929 09349<br>935 56552 |       |                                |                 |                       |  |  |
| 03/09  | 11  | 2 1 00204 00100 7   | 0867 73513  |       | [1230/1250z Unworkable QSB4/5] | Fair, QSB3      |                       |  |  |
| 08/09  | 11  | 2 000 07263 00001   | 1 00000 33665   |       | [1210z Weak QSB3]              | Fair            |                       |  |  |
| 10/09  | 11  | 2 000 02533 00001   | 1 00000 35255   |       | [1210z Weak]                   | Fair            |                       |  |  |
| 15/09  | 11  | 2 000 01567 00001   | 1 00000 37257   |       |                                | Fair, QRM3      |                       |  |  |
| 17/09  | 11  | 2 000 04463 00001   | 1 00000 34662   |       |                                | 1210z Strong 12 | 30z NRH 1250z Weak    |  |  |
| 22/09  | 11  | 2 000 06337 00001   | 1 00000 36261   |       |                                | 1210z Weak, res | t unworkable          |  |  |
| 24/09  | 11  | 2 000 06346 00001   | 1 00000 35662   |       | [1250z Fair, QSB3]             | Strong          |                       |  |  |
| 29/09  | 11  | 2 1 00447 00023 7   | 4914 03212  |       |                                | Weak, QRM3      |                       |  |  |
| 112 112 11:  | 2 1 112 112 112 1 113   | 2 112 112 1   |   |       |                                |                 |                       |  |  |
| 65746 2186   | 00447 00023 74914 27861 91504 51045 87203 36740 39329 29752<br>65746 21865 46906 74315 51261 17535 64314 29749 61021 39152<br>23925 30797 35647 31361 14239 03212 Courtesy PLdn                                 |   |   |       |                                |                 |                       |  |  |

### October 2021

| 1210z   | 14564kHz            | 1230z              | 13564kHz    | 1250z | 11464kHz          | [1200/1230z courtesy Ary] |  |
|---|---------------------|--------------------|-------------|-------|-------------------|---------------------------|--|
| 01/10   | 554                 | 4 1 00447 00023 74 | 4914 03212  |       |                   | 1250z only: Strong        |  |
| 06/10   | 554                 | 4 000 05969 00001  | 00000 42263 |       |                   | Very strong               |  |
| 08/10   | MI                  | SSED               |             |       |                   |                           |  |
| 13/10   | 554                 | 4 000 08152 00001  | 00000 32665 |       | [1210z Weak QRN2] | Strong QRN2               |  |
| 15/10   | 554                 | 4 000 05896 00001  | 00000 40266 |       | [1250z Fair]      | Strong                    |  |
| 20/10   | 554                 | 4 1 00513 00056 76 | 6829 46326  |       |                   | Weak QRM2                 |  |
| 22/10   | 554                 | 4 1 00513 00056 76 | 6829 46326  |       | [1250z Fair]      | Strong                    |  |
| 27/10   | 554                 | 4 1 00513 00056 76 | 6829 46326  |       | [1230z Strong]    | Fair                      |  |
| 554 554 554   | 1 554 554 554 1 554 | 554 554 1          |             |       |                   |                           |  |
| 00513 00056 76829 61817 22225 35180 89138 15140 75878 06348 39459 65032 60043 64484 84432 63023 51744 30814 65234 13595 08334 19125 34168 48018 49958 25321 65829 61226 20544 46756 62738 51955 91579 68365 17871 60237 55278 58847 45689 89515 09738 93140 80652 43856 85630 61688 91557 53251 10343 30915 00371 30795 57062 82939 41440 57337 99022 93917 46326 Courtesy PLdn |                     |                    |             |       |                   |                           |  |
| 29/10   | 554                 | 4 1 00513 00056 76 | 6829 46326  |       | [1250z Weak]      | Fair                      |  |

### XPA2 m

### Sunday/Tuesday

September 2021

| 1200z  | 13914kHz  | 1220z   | 15814kHz  | 1240z | 16314kHz            |             |
|--|---|---|---|-------|---------------------|-------------|
| 05/09  | 04407   | 00086 13791   | 03035   |       | [1200z Strong QRM3] | Very strong |
| 83480 6270<br>31745 9921<br>40383 3829<br>93656 79920<br>01717 4591<br>20325 87629<br>62058 67370  | 6 13791 32189 18060 507<br>3 10380 45054 13202 551<br>3 36001 11115 15827 858<br>1 72979 11938 96322 008<br>6 77699 58716 19004 261<br>2 25703 46116 26324 591<br>9 18471 83566 85545 289<br>6 22855 55302 76281 633<br>0 26443 94408 17201 172   | 10 48902 14255 54<br>992 91211 20295 50<br>449 34323 11291 86<br>58 47043 33724 35<br>88 67625 67028 05<br>996 04064 44954 86<br>661 24431 26584 55<br>266 88073 49818 03   | 910 04979<br>665 69232<br>571 24651<br>308 15995<br>937 78278<br>534 17529<br>473 66631   |       |                     |             |
| 07/09  | 04913   | 00142 44447   | 12032   |       | [1200z Weak QSB3]   | Strong      |
| 54297 0473'<br>23149 2199'<br>60174 9049'<br>28340 3390:<br>50160 3622:<br>03474 7377'<br>23853 4712'<br>40401 7844'<br>32343 1105:<br>2665 7221<br>13159 0466:<br>04237 2017'<br>14696 0760:  | 2 44447 26951 35871 919 7 46535 37863 47774 849 9 30899 07346 10795 444 7 61135 91396 39391 049 5 68456 26795 96269 644 6 86711 18476 46849 313 6 86089 35842 63403 510 5 26609 39900 20145 645 1 29063 57204 79797 748 2 54577 53159 62902 922 0 88218 34557 91333 2605 5 05968 98152 53196 217 8 22505 01197 12032  | 41 58742 29045 71<br>334 20727 02207 86<br>339 04676 71147 86<br>165 47555 55231 10<br>188 87792 36639 04<br>199 92392 38548 61<br>128 29285 54673 04<br>168 41313 64124 05<br>134 09635 89649 31<br>144 61666 80267 77<br>157 41363 88630 15<br>168 58018 62342 47<br>110 57955 34872 16   | 795 71701<br>051 94055<br>270 04690<br>154 86152<br>328 86646<br>335 58195<br>648 18972<br>053 60686<br>122 19443<br>160 09665<br>884 87819<br>902 16650  |       |                     |             |
| 12/09  | 04913   | 3 00142 44447   | 12032   |       | [1200z QRM2]        | Strong      |
| 14/09  | 00354   | 00232 09700   | 40654   |       | [1200z Fair]        | Strong      |
| 58561 0711. 59356 4581: 78644 5774 65484 8271- 98318 0122: 58483 1899 99520 10300 86206 2464. 23468 2625: 98009 9486: 75166 0089* 30688 5139. 21898 4981: 48585 7014: 28631 4089: 16943 3766: 60638 3059* 63800 9972: 64394 9614: 19843 6510: 68499 3922: 18203 9118 | 2 09700 91522 67436 316 6 14363 66311 9902 861 8 58886 21450 43152 024 9 44371 11003 93424 650 4 50737 38905 88789 128 0 95683 36995 06118 002 7 41380 60754 04342 536 0 68551 40727 74917 709 4 36112 60579 18890 064 0 75246 64215 26754 731 2 70655 16653 98011 635 9 26119 57597 3642 2766 4 29266 45627 52284 490 6 81548 22503 69855 238 31402 31464 06160 86 6 66111 49161 66787 999 3 31902 17865 88523 576 7 53425 15750 89301 703 3 98554 97969 39879 149 6 85153 62694 47056 806 3 31398 25964 5754 831398 25964 7364 7364 7364 7364 7364 7364 7364 73 | 56 12006 06720 57 128 68329 28937 39 146 72102 67550 17 164 13520 34334 83 110 88497 45513 70 155 99345 72874 11 131 06485 17673 61 146 17169 48836 84 130 00213 42273 16 130 40213 42273 16 130 429649 71754 88 130 429649 71754 88 130 429649 71754 88 130 92013 42273 16 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 141 02355 78731 94 151 523886 8539 75 151 523886 85397 54  | 837 76957<br>541 20926<br>767 53178<br>600 45841<br>916 15091<br>776 16446<br>371 16883<br>535 12911<br>469 38981<br>393 90241<br>012 66564<br>793 12885<br>556 60112<br>924 53135<br>488 36182<br>581 22926<br>739 44598<br>188 65134<br>125 54878<br>446 92346<br>546 26925 |       |                     |             |
| 19/09  | 00354   | 00232 09700   | 40654   |       | [1220z Strong]      | Weak        |
| 81749 3369:<br>45522 00284<br>78325 4521-<br>86370 4605:<br>00603 0154:<br>66097 9004:<br>84065 5168:<br>32278 8553'<br>70385 4900:<br>38051 1759'<br>60670 4605:<br>50688 4663:<br>52655 0887<br>75468 9227<br>00918 8613:  | 02867 8 16230 08386 15638 344 5 95181 40684 28604 719 0 93390 05356 88753 349 4 16008 32689 10732 635 9 86333 91173 33358 160 3 25466 50667 69986 168 7 50880 38805 93004 221 8 81800 66199 74075 396 7 91878 24871 44438 263 8 40096 53180 27094 921 7 35482 80457 12033 228 6 62137 23492 80607 288 6 14569 90932 08653 062 1 89324 47582 19006 380 1 59293 15379 95391 445 3 33123 66738 58093 379 3 95381 35783 65819 669   | 224 66746 86592 83<br>444 10818 18000 57<br>888 06830 88351 19<br>116 08463 94477 88<br>512 04826 24646 55<br>81 2825 24646 56<br>81 2825 2466 56<br>81 2825 2 | 732 57713<br>676 40164<br>389 53394<br>130 03084<br>280 60207<br>747 43332<br>743 04760<br>030 72323<br>570 79900<br>031 68766<br>540 99880<br>116 74638<br>000 51378<br>586 02516<br>463 87821<br>012 22135  |       |                     | Strong      |
| 26/09  | 02867   | 00168 16230   | 56576   |       | [1200z Very strong] | Strong      |

[1200z Very strong]

Strong, QRM3

53565 09219 69227 32030 33495 42534 62597 22866 49524 47112 32873 73118 25838 07875 07913 02943 85574 57071 63104 07381 83517 49204 61610 71678 38819 26622 09958 75637 34804 19136 02963 32748 67141 99467 72049 22738 43472 62004 42107

#### October 2021

28/09

| 1200z  | 14469kHz  | 1220z  | 16169kHz  | 1240z | 17469kHz           |             |
|--|---|--|---|-------|--------------------|-------------|
| 03/10  | 01251   | 00202 86260  | 47276   |       | [1200z Fair, QSB3] | Strong      |
| 05/10  | 09030   | 00162 64201  | 13464   |       |                    | Very strong |
| 37429 4058<br>97735 4832<br>42926 7445<br>71867 1082<br>09096 1862<br>74540 5852<br>18155 1475<br>81116 7764<br>46332 9112<br>70763 5455<br>65049 6831<br>55908 7256<br>32896 2041<br>95364 4882<br>43203 2266   | 52 64201 40789 92390 8318<br>52 89594 11627 81887 4300<br>50 29924 01628 49000 9289<br>59 80307 13088 53429 5328<br>55 53553 80860 01756 3369<br>57 79602 34101 86836 1686<br>50 88445 78242 82887 6861<br>50 88445 78242 82887 6861<br>50 10 76524 27281 63497 3401<br>52 96287 71996 90035 1759<br>54 34555 60218 44908 9280<br>58 91530 60538 85444 8827<br>50 09977 64258 43484 2880<br>9 42209 88531 68378 1769<br>54 68274 95590 59387 0353<br>56 75033 45732 61762 3098<br>54 73204 65062 13464  | 16 52292 73078 75 12 44743 14089 84 12 52330 95851 00 14 70510 42056 21 18 09923 33348 44 4 08868 99207 60 14 82710 84697 47 4 10814 33752 00 14 72752 47322 59 18 35187 22334 16 12 53264 33610 29 10 55434 61048 11 15 83171 61779 04 12 56226 39669 46 14 00505 30582 16  Coun  | 770 37853<br>120 46689<br>5529 29850<br>798 39894<br>010 11566<br>222 53363<br>496 79805<br>962 54646<br>5324 13923<br>814 49061<br>584 81807<br>082 69648<br>803 97795<br>108 39275<br>5553 13160<br>resy PLdn                         |       |                    |             |
| 10/10  | 09030   | 00162 64201  | 13464   |       | [1200zVery strong] | Strong      |
| 12/10  | Poor co   | ondx : CME   |   |       | Unworkable         |             |
| 17/10  | 00497   | 00198 3206   | . 04763   |       |                    | Very strong |
| 23281 7504<br>27489 6288<br>51925 4505<br>76207 5702<br>14413 6885<br>34082 2945<br>45829 4146<br>90418 1329<br>47108 2091<br>22312 4136<br>51913 7407<br>17634 5463<br>20576 6105<br>70433 1425<br>12077 7950<br>14449 9198<br>44810 5313<br>52792 7363 | 28 32065 71744 34590 1790 28 32065 71744 34590 1790 28 32065 71744 34590 1790 28 36 40 8546 55300 41154 2953 28 40 4040 68069 65415 5232 28 40 4040 68069 65415 5232 28 52 26811 37188 65099 8103 28 53 8058 94554 84199 5576 29 39473 58665 49019 7530 27 34940 05039 78062 1364 27 34940 05039 78062 1364 27 34940 05039 78062 1364 27 34940 05039 78062 1364 27 34940 93029 18628 5677 27 9886 36842 10426 1408 28 347 44731 08849 74256 4523 27 79886 36842 10426 1408 28 34 70077 96718 11054 9707 27 26601 57453 63239 9731 28 59945 78715 07822 5587 27 07585 72746 30883 3215 | 17.7887 24719 51<br>12.68699 79877 06<br>16.683431 00103 89<br>10.62280 51374 27<br>17.24757 35558 03578 51<br>16.31519 79944 92<br>19.32054 21307 52<br>19.32054 21307 52<br>19.3205 | 049 95963<br>906 06725<br>835 54833<br>011 09157<br>8850 21258<br>889 77086<br>113 56210<br>161 51793<br>128 60877<br>402 06406<br>263 50106<br>574 73430<br>750 60796<br>314 14387<br>402 20877<br>882 29965<br>445 25583<br>445 37618 |       |                    |             |
| 19/10  | 04464   | 00146 47559  | 42107   |       |                    | Strong      |
| 24/10  | 04464   | 00146 47559  | 42107   |       |                    | Fair        |
| 72513 7340<br>33306 3125<br>53738 4055<br>87177 3871<br>84190 9497<br>39793 8311<br>94256 0654<br>26736 7153<br>33325 3989<br>52615 3104   | 16 47559 04785 89360 6571<br>14 24604 61121 05336 6231<br>19 06052 12395 50037 6551<br>15 225543 31363 04980 9281<br>10 60750 30910 13781 6942<br>13 94771 85835 96797 0366<br>12 68046 44945 48877 0435<br>13 60604 64856 66689 8681<br>12 26354 76497 74755 2257<br>13 18975 80032 56588 3100<br>10 86725 29276 71304 6411<br>19 69227 32030 33495 4253   | 1 08860 05526 59<br>9 99867 73524 75<br>3 38873 86459 94<br>12 47338 07938 22<br>17 73989 99388 95<br>18 87475 34647 03<br>7 96443 67891 86<br>11 34035 73392 47<br>10 64962 20351 68<br>2 46064 49725 99  | 304 69605<br>425 73668<br>257 58578<br>552 47079<br>893 35114<br>494 90113<br>120 11347<br>308 80338<br>448 59694<br>738 73371  |       |                    |             |

26/10 00309 00206 49978 ... 52457 [1240z Very strong] Strong

00309 00206 49978 40349 38824 16145 28523 48273 25433 31194 91282 59082 36669 02157 81711 79294 80220 57654 13652 18263 13606 70750 40137 64077 93880 81198 29260 00731 59657 33271 34722 61468 55798 96061 51151 27548 03541 11466 68216 62906 75894 38225 72941 48984 83587 52183 72268 82228 57715 70604 72534 76242 38938 44713 78307 29665 94620 62703 92667 09484 13614 91577 85243 86271 06770 40248 25356 38067 97750 08327 42270 10984 39693 88139 80921 97540 68197 66736 29850 90810 29591 81369 01753 29947 03086 41120 60015 91229 97903 84656 29591 81369 01753 29947 03086 41120 60015 91229 97903 84656 58624 00822 24241 18369 80834 22217 12053 00469 02749 03386 51657 8712 04632 13369 53499 44530 21608 84574 55651 29934 22331 42985 36996 47793 15091 61371 90737 73337 05477 87836 33950 39110 97005 51541 85817 39618 02035 77609 54039 11770 71976 10879 51980 50507 01398 58373 79575 96326 65081 20316 45350 84544 08516 90772 75456 07053 87235 93728 48256 34448 98325 46571 77603 68065 37049 38142 02754 34427 82311 41632 88970 12968 63088 90309 38657 46317 19664 45271 08040 88178 77418 13244 85245 78566 61066 55669 95379 17495 38495 70811 25147 88113 23444 41944 93376 36989 89415 60067 37276 30860 38121 68540 81177 62871 22627 74841 39072 33150 72441 62830 10257 25572 99172 75290 79949 94692 06547 30373 52457 10257 25572 99172 75290 79949 94692 06547 30373 52457

Courtesy PLdn

00309 00206 49978 ... 52457 31/10 [1200z Strong] Fair

### Monday/Wednesday

11/10

13/10

01958 00105 37636 ... 44314

01958 00105 37636 ... 44314

| Septemb   | ber 2021  |   |   |       |                           |             |            |
|---|---|---|---|-------|---------------------------|-------------|------------|
| 0700z   | 12152kHz  | 0720z   | 13552kHz  | 0740z | 13952kHz                  |             |            |
| 01/09   | 0673  | 31 00001 00000  | 35261   |       | [0700z Weak, QSB3]        | Fair QSB3   | Poor Cond  |
| 05/09   | 0265  | 59 00130 12597  | 41665   |       | [0720z QRM2]              | Fair QSB3   | roof Colla |
| 51929 9350<br>79214 1555<br>96152 993<br>13131 7301<br>16400 5110<br>41773 3019<br>78090 8659<br>76244 7387<br>66387 4788<br>11607 2959<br>05452 7895 | 80 12597 03343 39774 3' 30 169567 35656 22250 1: \$2 90003 60998 19511 7: \$2 90003 60998 19511 7: \$8 78712 07308 30095 8: \$19 22574 48401 35106 3: \$19 7150 95869 28305 5: \$19 29574 48504 81329 4' \$19 51755 01519 89629 7: \$10 73473 53677 32744 6: \$10 03269 74725 83962 5: \$2 83552 58360 13986 3: \$14 99735 16765 70711 0: \$10 185956 18565 | 6303 62646 15401 2<br>3991 18562 16219 5<br>6030 33730 21482 9<br>6404 81153 17255 1<br>7704 44075 79116 4<br>913 83629 51863 3<br>1942 39387 10226 8<br>2725 84284 06705 7<br>3625 32428 23291 5<br>5904 29323 87544 6<br>4699 71438 03804 9 | 5658 63676<br>3103 24199<br>8028 08635<br>0466 94175<br>7131 44516<br>5688 04575<br>8842 76506<br>2349 02564<br>1361 20373<br>7694 05621<br>11152 82787 |       |                           |             |            |
| 08/09   | 0265  | 59 00130 12597  | 41665   |       |                           | Very strong |            |
| 13/09   | 0265  | 59 00130 12597  | 41665   |       |                           | Very strong |            |
| 15/09   | 0265  | 59 00130 12597  | 41665   |       | [0700z QRM4 0720z Strong] | Weak        |            |
| 20/09   | 0900  | 06 00001 00000  | 34261   |       |                           | Very strong |            |
| 22/09   | 0629  | 95 00001 00000  | 34667   |       |                           | Very strong |            |
| 27/09   | 0852  | 24 00001 00000  | 35662   |       |                           | Very strong |            |
| 29/09   | 0777  | 73 00001 00000  | 36266   |       | [0700z Strong]            | Very strong |            |
| October   | 2021  |   |   |       |                           |             |            |
| 0700z   | 13372kHz  | 0720z   | 14672kHz  | 0740z | 15872kHz                  |             |            |
| 04/10   | 0195  | 58 00105 37636  | 44314   |       | [0740z Strong]            | Fair, QSB2  |            |
| 26939 1837<br>91917 3582<br>13265 5005<br>63271 3742<br>79058 6111<br>71993 7157<br>91065 8280<br>22589 4062<br>00669 8036                            | 05 37636 95360 08221 5:<br>75 20925 93821 75145 2:<br>23 73358 71096 97429 3:<br>80 26292 05480 92126 6:<br>72 29116 29194 21757 1:<br>16 83303 18048 42368 8:<br>73 29747 06031 73469 7:<br>79 99844 66423 33920 8:<br>84 09907 62623 13536 2:<br>87 93421 33621 57928 7:<br>87 05175 63866 44148 1:   | 8310 51838 46007 9<br>8945 63721 12116 6<br>6940 80420 74428 0<br>9399 00052 59913 4<br>4381 59734 31230 8<br>2471 36473 65499 5<br>5317 91317 81431 3<br>9416 66538 45921 3<br>9688 51844 30664 3<br>4620 84284 44314                        | 8229 90021<br>2898 81807<br>7173 75989<br>0486 19345<br>0471 85318<br>9801 02864<br>2617 23326<br>8978 25590  |       |                           |             |            |
| 06/10   | 0195  | 8 00105 37636   | 44314   |       | 0740z only                | Weak        |            |

[0700z QSB3/4]

[0700z NRH]

Weak

Weak

 18/10
 NRH

 20/10
 01582 00001 00000 ... 34661
 [0700/0720z Unworkable]
 Strong

 25/10
 03771 00001 00000 ... 35262
 [0700z Strong]
 Weak

 27/10
 09750 00001 00000 ... 34666
 [0700z Very strong]
 Weak

### XPA2 Wed/Fri

### Wednesday/Friday

September 2021

1200z 13914kHz 1220z 15814kHz 1240z 16314kHz

01/09 07042 00096 19820 ... 76225 Very strong

 $\begin{array}{c} 07042\ 00096\ 19820\ 39033\ 37658\ 71385\ 83167\ 52155\ 88862\ 07070\ 15429\ 11568\ 68775\ 85500\ 42288\ 10830\ 06360\ 29019\ 12442\ 28232\ 33833\ 04634\ 53666\ 98566\ 93371\ 39584\ 97448\ 90492\ 11545\ 13085\ 18167\ 84438\ 86423\ 55958\ 64830\ 91752\ 04010\ 03200\ 41753\ 38462\ 11972\ 63282\ 83074\ 38071\ 32686\ 00343\ 47599\ 87726\ 59505\ 76653\ 46889\ 33602\ 88193\ 80997\ 26131\ 92233\ 03101\ 12016\ 07481\ 54034\ 87228\ 00166\ 65917\ 82339\ 66584\ 81753\ 10633\ 68115\ 26503\ 88726\ 03020\ 70308\ 06336\ 33380\ 88759\ 82784\ 60885\ 52001\ 46643\ 45483\ 44398\ 88651\ 81100\ 61307\ 10344\ 66610\ 49119\ 66670\ 97590\ 66997\ 55568\ 03411\ 91223\ 90038\ 77850\ 36646\ 67828\ 08158\ 56644\ 55705\ 00335\ 00544\ 17105\ 44073\ 43211\ 49368\ 96058\ 10674\ 23220\ 81618\ 88473\ 03408\ 46186\ 77927\ 26611\ 15085\ 00226\ 887755\ 5103\ 32801\ 83082\ 22399\ 22700\ 44315\ 05484\ 28556\ 61118\ 04403\ 62618\ 27726\ 09880\ 83620\ 41058\ 30022\ 98721\ 17625\ 80114\ 06066\ 50722\ 67631\ 84449\ 74544\ 61351\ 29250\ 41317\ 46330\ 88525\ 08566\ 4674\ 32320\ 8231\ 1217\ 98259\ 5995\ 42381\ 78782\ 53628\ 75648\ 77583\ 50633\ 82768\ 54162\ 52071\ 77063\ 53255\ 51712\ 18364\ 06222\ 76777\ 21413\ 46191\ 67299\ 19291\ 44809\ 17560\ 49580\ 73533\ 818749\ 01192\ 05466\ 44558\ 93339\ 00505\ 61664\ 82650\ 58101\ 75233\ 58216\ 40328\ 29744\ 44718\ 76225\ 61664\ 82650\ 58101\ 75233\ 58216\ 40328\ 29744\ 44718\ 76225\ 61664\ 82650\ 58101\ 75233\ 58216\ 40328\ 29744\ 44718\ 76225$ 

Courtesy PLdn

03/09 07042 00096 19820 ... 76225 [1200z Very strong] Fair, QSB3 QRM3

08/09 08728 00142 73819 ... 61776 [1200z Weak QSB3] Strong

08728 00142 73819 71767 70036 51265 62236 53885 69831 91800 03740 07656 28412 06965 91909 92889 82187 64104 51934 84234 76011 40647 42900 69520 05815 83709 60371 21884 42530 56719 73303 2797 45276 01389 00159 79863 92406 07015 84257 70517 14000 86022 00443 04581 89049 08401 31087 42148 90176 68128 42500 90367 60140 74063 80862 50793 56318 04660 36450 33530 96849 48786 26715 74859 69321 79401 61581 26716 39900 77298 59491 87290 535691 20473 42458 94468 09220 26628 80045 94741 87058 32045 85060 90005 00330 40076 535487 15399 53065 04968 23038 85038 00913 92546 76352 59914 45929 37582 38425 50923 06336 68219 57155 63817 81718 07525 40558 47883 28301 34624 00046 33132 70893 96550 87357 67286 99292 46013 55535 56096 54089 50994 43452 21592 50905 92017 49071 11473 61258 80631 12240 22706 08833 35497 68616 82681 28004 00574 86399 8871 62317 50517 77391 85781 61776

10/09 08728 00142 73819 ... 61776 Strong

15/09 01078 00232 49796 ... 54136 Very strong

 $\begin{array}{c} 01078\ 00232\ 49796\ 61454\ 68943\ 69275\ 79565\ 26709\ 62510\ 36021\ 23225\ 18799\ 86870\ 01669\ 99534\ 20992\ 91658\ 92223\ 99362\ 13220\ 77197\ 04728\ 06621\ 74047\ 477113\ 59634\ 29685\ 62273\ 35005\ 89946\ 43770\ 95923\ 91113\ 29027\ 79674\ 51231\ 34354\ 45300\ 27757\ 57650\ 73191\ 92185\ 30764\ 02966\ 22268\ 55523\ 77362\ 46047\ 33601\ 53437\ 39074\ 33682\ 94516\ 92483\ 44666\ 23382\ 71802\ 42523\ 51609\ 27250\ 81856\ 66871\ 81362\ 64686\ 17555\ 64798\ 00506\ 81856\ 87059\ 19299\ 87523\ 61059\ 94845\ 14129\ 62565\ 06476\ 06687\ 75168\ 77092\ 28633\ 29162\ 28847\ 81668\ 36778\ 86774\ 88580\ 40908\ 72543\ 97663\ 88075\ 12176\ 14712\ 20232\ 68595\ 08511\ 14417\ 93018\ 76738\ 06519\ 42547\ 44460\ 17505\ 62338\ 62968\ 21739\ 49443\ 89966\ 50249\ 37894\ 37541\ 59045\ 55103\ 66834\ 61933\ 15334\ 98165\ 95836\ 31875\ 48454\ 07958\ 06703\ 65130\ 43236\ 40485\ 21464\ 66933\ 29347\ 58100\ 56222\ 21169\ 40059\ 15271\ 30367\ 35728\ 04897\ 55884\ 08410\ 12856\ 71643\ 05791\ 69939\ 63545\ 44865\ 07756\ 17174\ 31736\ 77946\ 44198\ 86620\ 43199\ 13072\ 89964\ 45135\ 86684\ 08955\ 09112\ 04442\ 74278\ 84565\ 37561\ 33144\ 00361\ 66678\ 81648\ 16266\ 75933\ 36914\ 27729\ 47258\ 55494\ 44634\ 10870\ 35012\ 15087\ 90583\ 53945\ 69948\ 88284\ 62336\ 15924\ 52800\ 62643\ 17957\ 91274\ 40668\ 42152\ 18416\ 14704\ 01126\ 15828\ 49574\ 52564\ 69770\ 49138\ 09536\ 82672\ 68861\ 24332\ 72566\ 83756\ 90891\ 68556\ 66405\ 23883\ 24206\ 22093\ 50837\ 50855\ 68152\ 05681\ 27839\ 32540\ 54369\ 35494\ 9919\ 66828\ 15902\ 02304\ 87719\ 20122\ 44358\ 55942\ 95678\ 01297\ 51405\ 96633\ 37694\ 37199\ 26176\ 43050\ 8414\ 03286\ 15992\ 98520\ 54136$ 

17/09 01078 00232 49796 ... 54136 [1200z Strong] Very strong

[1220z Strong, 1240z QRM3]

Fair

27/10 00382 00188 13099 ... 24223

 $00382\,00188\,13099\,08588\,42347\,76868\,79197\,38293\,16002\,70402\\70295\,57338\,98850\,31913\,71831\,90337\,45257\,47238\,68078\,06917$ 53537 46964 54206 28609 35189 97674 21850 84557 05475 01856

75354 39332 49332 01729 50773 66761 62615 45029 76717 66085 37361 92460 99545 72941 49852 26724 21106 30006 13274 10669 55840 56342 26341 39959 56299 07678 65965 22784 02163 72270 28419 95071 47045 90299 42739 45303 05434 15125 49335 05727

16812 13615 36845 91191 73920 40262 34660 91194 95969 45884 90673 37842 13564 72164 57605 04086 70265 20814 04904 49969

46708 31270 36325 12845 05287 90458 14866 25480 82940 86845 21590 48403 57703 13442 46239 39401 87021 24476 68427 09174

91494 51306 15725 54470 08826 54365 44050 49376 54684 33786 94792 79690 26033 72893 95906 19793 54685 91394 31441 19184 12492 92327 50435 11661 94604 53453 76048 75397 52324 32735 15865 32440 40497 60045 72482 66981 22379 20914 08009 92742 50231 18442 49780 38576 64800 03139 13622 76673 81411 34129

45457 14752 34443 67923 09985 32479 75215 19601 59800 13286 46133 41841 18413 72755 82498 70778 17517 21062 77654 44733

23647 35769 16613 17316 93221 54381 82228 16325 25941 80964 Courtesy PLdn

29/10  $00382\ 00188\ 13099\ ...\ 24223$ [1200z Strong] Fair

### Other XPA2 freqs

#### Onto others' logs:

13431 03-09-2021 1100 XPA2 MFSK-16/20Bd 01608 00001 00000 40251 Ary FRI 12131 03-09-2021 1120 XPA2 MFSK-16/20Bd 01608 00001 00000 40251 Ary FRI 11431 03-09-2021 1140 XPA2 MFSK-16/20Bd 01608 00001 00000 40251 Ary FRI

#### Other Polytones [H-FD]:

### 1B XPA2

Sat 02.10.2021 0910Z 17438 msg

Sat 02.10.2021 0930Z 16338 msg

Sat 02.10.2021 0950Z 15938 msg

Mon 04.10.2021 0910Z 17471 msg

Mon 04.10.2021 0930Z 16149 msg

Mon 04.10.2021 0950Z 14406 msg

Mon 04.10.2021 1500Z 13906 msg

Mon 04.10.2021 1520Z 12106 msg

Mon 04.10.2021 1540Z 10906 msg

Tue 12.10.2021 1600Z 13542 msg

Tue 12.10.2021 1620Z 12142 msg

Tue 12.10.2021 1640Z 11442 msg

Wed 13.10.2021 1100Z 14672 msg

Wed 13.10.2021 1120Z 13472 msg Wed 13.10.2021 1140Z 12172 msg

Fri 15.10.2021 1100Z 14537 msg

Fri 15.10.2021 1120Z 13437 msg

Fri 15.10.2021 1140Z 10737 msg

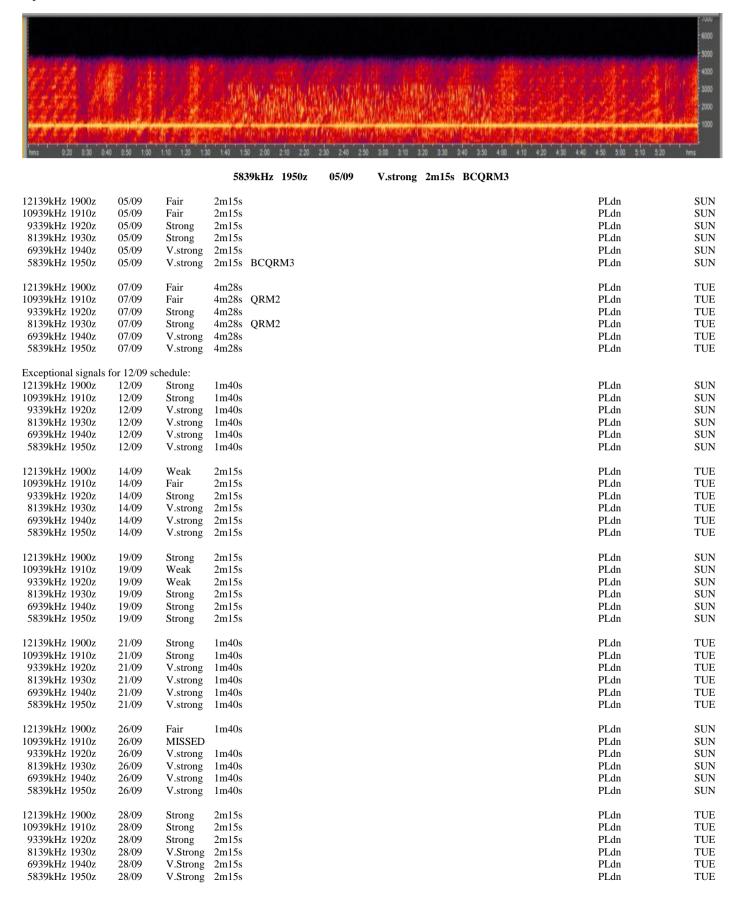
Wed 27.10.2021 1100Z 14672 msg

Wed 27.10.2021 1120Z 13472 msg Wed 27.10.2021 1140Z 12172 msg

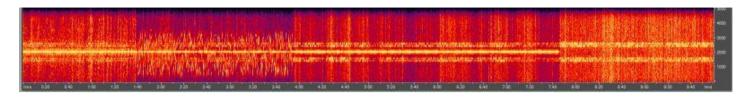
### XPB1

#### Sunday/Tuesday

Sept 2021



### October 2021



| 5823KHZ | 1940z | 05/10 | 2m15s | I I Y/het | QRM2 |
|---------|-------|-------|-------|-----------|------|
|         |       |       |       |           |      |

| 0222112 10002                  | 05/10          | Vatuona              | 2m15c                 |              |           | PLdn   | THE        |
|--------------------------------|----------------|----------------------|-----------------------|--------------|-----------|--------|------------|
| 9323kHz 1900z<br>8123kHz 1910z | 05/10<br>05/10 | V.strong<br>V.strong | 2m15s<br>2m15s        |              |           | PLdn   | TUE<br>TUE |
| 7723kHz 1920z                  | 05/10          | V.strong             | 2m15s<br>2m15s        |              |           | PLdn   | TUE        |
| 6923kHz 1930z                  | 05/10          | V.strong             | 2m15s<br>2m15s        |              |           | PLdn   | TUE        |
| 5823kHz 1940z                  | 05/10          | V.strong<br>V.strong | 2m15s TTY/het QRM2    | [Het~2 3kHz] | see above | PLdn   | TUE        |
| 5123kHz 1950z                  | 05/10          | V.strong<br>V.strong | 2m15s 111/net QRW2    | [Het-2.5kHz] | see above | PLdn   | TUE        |
| 3123KHZ 1730Z                  | 03/10          | v.strong             | 211133                |              |           | 1 Edil | TOL        |
|                                |                |                      |                       |              |           |        |            |
| 9323kHz 1900z                  | 10/10          | V.strong             | 2m15s BCQRM2          |              |           | PLdn   | SUN        |
| 8123kHz 1910z                  | 10/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 7723kHz 1920z                  | 10/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 6923kHz 1930z                  | 10/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 5823kHz 1940z                  | 10/10          | V.strong             | 2m15s TTYQRM1         |              |           | PLdn   | SUN        |
| 5123kHz 1950z                  | 10/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 9323kHz 1900z                  | 12/10          | Weak                 | 2m15s QRM2            |              |           | PLdn   | TUE        |
| 8123kHz 1910z                  | 12/10          | Weak                 | 2m15s QRM2            |              |           | PLdn   | TUE        |
| 7723kHz 1920z                  | 12/10          | Weak                 | 2m15s QRM3            |              |           | PLdn   | TUE        |
| 6923kHz 1930z                  | 12/10          | Fair                 | 2m15s                 |              |           | PLdn   | TUE        |
| 5823kHz 1940z                  | 12/10          | Strong               | 2m15s TTYQRM2         |              |           | PLdn   | TUE        |
| 5123kHz 1950z                  | 12/10          | Strong               | 2m15s                 |              |           | PLdn   | TUE        |
|                                |                | Ü                    |                       |              |           |        |            |
| 9323kHz 1900z                  | 17/10          | Fair                 | 2m15s                 |              |           | PLdn   | SUN        |
| 8123kHz 1910z                  | 17/10          | Fair                 | 2m15s                 |              |           | PLdn   | SUN        |
| 7723kHz 1920z                  | 17/10          | Strong               | 2m15s                 |              |           | PLdn   | SUN        |
| 6923kHz 1930z                  | 17/10          | Strong               | 2m15s                 |              |           | PLdn   | SUN        |
| 5823kHz 1940z                  | 17/10          | V.strong             | 2m15s TTYQRM1         |              |           | PLdn   | SUN        |
| 5123kHz 1950z                  | 17/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 9323kHz 1900z                  | 19/10          | Weak                 | 4m28s                 |              |           | PLdn   | TUE        |
| 8123kHz 1910z                  | 19/10          | Weak                 | 4m28s                 |              |           | PLdn   | TUE        |
| 7723kHz 1920z                  | 19/10          | Fair                 | 4m28s                 |              |           | PLdn   | TUE        |
| 6923kHz 1930z                  | 19/10          | Strong               | 4m28s                 |              |           | PLdn   | TUE        |
| 5823kHz 1940z                  | 19/10          | Strong               | 4m28s TTYQRM4         |              |           | PLdn   | TUE        |
| 5123kHz 1950z                  | 19/10          | V.strong             | 4m28s                 |              |           | PLdn   | TUE        |
| 02221-Hz 1000z                 | 24/10          | Fair                 | 1m40s BCQRM2          |              |           | PLdn   | SUN        |
| 9323kHz 1900z<br>8123kHz 1910z | 24/10          |                      | 1m40s BCQRM2<br>1m40s |              |           | PLdn   | SUN        |
|                                | 24/10          | Strong<br>Strong     | 1m40s<br>1m40s        |              |           | PLdn   | SUN        |
| 7723kHz 1920z<br>6923kHz 1930z | 24/10          | V.strong             | 1m40s<br>1m40s        |              |           | PLdn   | SUN        |
| 5823kHz 1940z                  | 24/10          | V.strong             | 1m40s<br>1m40s        |              |           | PLdn   | SUN        |
| 5123kHz 1950z                  | 24/10          | V.strong             | 1m40s<br>1m40s        |              |           | PLdn   | SUN        |
| 3123K112 1930Z                 | 24/10          | v.strong             | 1111408               |              |           | I Luii | 3011       |
| 9323kHz 1900z                  | 26/10          | Fair                 | 2m15s                 |              |           | PLdn   | TUE        |
| 8123kHz 1910z                  | 26/10          | Fair                 | 2m15s                 |              |           | PLdn   | TUE        |
| 7723kHz 1920z                  | 26/10          | Fair                 | 2m15s                 |              |           | PLdn   | TUE        |
| 6923kHz 1930z                  | 26/10          | Fair                 | 2m15s                 |              |           | PLdn   | TUE        |
| 5823kHz 1940z                  | 26/10          | V.strong             | 2m15s TTYQRM1         |              |           | PLdn   | TUE        |
| 5123kHz 1950z                  | 26/10          | V.strong             | 2m15s                 |              |           | PLdn   | TUE        |
| 9323kHz 1900z                  | 31/10          | Strong               | 2m15s BCQRM4          |              |           | PLdn   | SUN        |
| 8123kHz 1910z                  | 31/10          | Strong               | 2m15s QRM2            |              |           | PLdn   | SUN        |
| 7723kHz 1920z                  | 31/10          | Strong               | 2m15s                 |              |           | PLdn   | SUN        |
| 6923kHz 1930z                  | 31/10          | V.strong             | 2m15s                 |              |           | PLdn   | SUN        |
| 5823kHz 1940z                  | 31/10          | V.strong             | 2m15s TTYQRM2         |              |           | PLdn   | SUN        |
| 5123kHz 1950z                  | 31/10          | Strong               | 2m15s                 |              |           | PLdn   | SUN        |
|                                |                | 6                    |                       |              |           |        |            |

### Monday/Saturday

### Sept 2021

| 14462kHz 1200z 04/09<br>13962kHz 1210z 04/09<br>13462kHz 1220z 04/09<br>12162kHz 1230z 04/09<br>11562kHz 1240z 04/09<br>10962kHz 1250z 04/09                               | Weak<br>MISSED<br>Weak<br>Strong<br>NRH<br>MISSED    | 4m28s<br>4m28s QRM3<br>4m28s QRM3  |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | SAT<br>SAT<br>SAT<br>SAT<br>SAT<br>SAT |
|--|--|--|-----------------------|--|--|
| 14462kHz 1200z 06/09<br>13962kHz 1210z 06/09<br>13462kHz 1220z 06/09<br>12162kHz 1230z 06/09<br>11562kHz 1240z 06/09<br>10962kHz 1250z 06/09                               | NRH<br>Weak<br>Unworkab<br>Weak<br>V.weak<br>Weak    | 4m28s QSB4<br>ble<br>4m28s QRM3<br>4m28s QRM3<br>4m28s   |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | MON<br>MON<br>MON<br>MON<br>MON<br>MON |
| 14462 11-09-2021 1200 XPE<br>13962 11-09-2021 1210 XPE<br>13462 11-09-2021 1220 XPE<br>12162 11-09-2021 1230 XPE<br>11562 11-09-2021 1240 XPE<br>10962 11-09-2021 1250 XPE | 1 MFSK-16<br>1 MFSK-16<br>1 MFSK-16<br>1 MFSK-16     | Russian intel. Russian intel. Russian intel. Russian intel. Russian intel.   |                       | Ary<br>Ary<br>Ary<br>Ary<br>Ary              | SAT<br>SAT<br>SAT<br>SAT<br>SAT<br>SAT |
| 13/09/2021 MISSE   | )  |  |                       | PLdn   | MON                                    |
| 18/09/2021 MISSE   | )  |  |                       | PLdn   | SAT                                    |
| 14462kHz 1200z 20/09<br>13962kHz 1210z 20/09<br>13462kHz 1220z 20/09<br>12162kHz 1230z 20/09<br>11562kHz 1240z 20/09<br>10962kHz 1250z 20/09                               | Weak<br>Weak<br>Weak<br>Fair<br>Fair<br>Weak         | 4m28s<br>4m28s<br>4m28s<br>4m28s<br>4m28s<br>4m28s<br>QRM3   |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | MON<br>MON<br>MON<br>MON<br>MON<br>MON |
| 14462kHz 1200z 25/09<br>13962kHz 1210z 25/09<br>13462kHz 1220z 25/09<br>12162kHz 1230z 25/09<br>11562kHz 1240z 25/09<br>10962kHz 1250z 25/09                               | NRH<br>NRH<br>Fair<br>Strong<br>Fair<br>Fair         | QRM5<br>QRM5<br>4m28s QRM3<br>4m28s<br>4m28s QRM3<br>4m28s   |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | SAT<br>SAT<br>SAT<br>SAT<br>SAT<br>SAT |
| 14462kHz 1200z 27/09<br>13962kHz 1210z 27/09<br>13462kHz 1220z 27/09<br>12162kHz 1230z 27/09<br>11562kHz 1240z 27/09<br>10962kHz 1250z 27/09                               | Weak<br>Weak<br>Strong<br>Strong<br>Strong<br>Fair   | 1m40s QSB3<br>1m40s<br>1m40s<br>1m40s<br>1m40s<br>1m40s  |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | MON<br>MON<br>MON<br>MON<br>MON        |
| October 2021   |  |  |                       |  |  |
| 14462kHz 1200z 02/10<br>13962kHz 1210z 02/10<br>13462kHz 1220z 02/10<br>12162kHz 1230z 02/10<br>11562kHz 1240z 02/10<br>10962kHz 1250z 02/10                               |  | Off watch MISSED | See H-FD others' logs |  | SAT<br>SAT<br>SAT<br>SAT<br>SAT<br>SAT |
| 14462kHz 1200z 04/10<br>13962kHz 1210z 04/10<br>13462kHz 1220z 04/10<br>12162kHz 1230z 04/10<br>11562kHz 1240z 04/10<br>10962kHz 1250z 04/10                               | Fair<br>Fair<br>Fair<br>Fair<br>Fair<br>Fair         | 1m40s<br>1m40s<br>1m40s<br>1m40s<br>1m40s QRM2<br>1m40s  |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | MON<br>MON<br>MON<br>MON<br>MON<br>MON |
| 14462kHz 1200z 09/10<br>13962kHz 1210z 09/10<br>13462kHz 1220z 09/10<br>12162kHz 1230z 09/10<br>11562kHz 1240z 09/10<br>10962kHz 1250z 09/10                               | Strong<br>Strong<br>Strong<br>Strong<br>Weak<br>Weak | 1m40s<br>1m40s<br>1m40s<br>1m40s<br>1m40s QRM3<br>1m40s QRM3   |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | SAT<br>SAT<br>SAT<br>SAT<br>SAT<br>SAT |
| 14462kHz 1200z 11/10<br>13962kHz 1210z 11/10<br>13462kHz 1220z 11/10<br>12162kHz 1230z 11/10<br>11562kHz 1240z 11/10<br>10962kHz 1250z 11/10                               | Weak<br>Weak<br>Strong<br>Strong<br>Fair<br>Weak     | 4m28s<br>4m28s<br>4m28s<br>4m28s QRM2<br>4m28s QRM2<br>4m28s   |                       | PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn<br>PLdn | MON<br>MON<br>MON<br>MON<br>MON        |

| 14462kHz 1200z    | 16/10   | Strong   | 4m28s    |         | PLdn | SAT |
|-------------------|---------|----------|----------|---------|------|-----|
| 13962kHz 1210z    | 16/10   | Strong   | 4m28s    |         | PLdn | SAT |
| 13462kHz 1220z    | 16/10   | Strong   | 4m28s    | QRM3    | PLdn | SAT |
| 12162kHz 1230z    | 16/10   | Fair     | 4m28s    | QRM3    | PLdn | SAT |
| 11562kHz 1240z    | 16/10   | Fair     | 4m28s    | QRM3    | PLdn | SAT |
| 10962kHz 1250z    | 16/10   | Fair     | 4m28s    | QRM3    | PLdn | SAT |
| 14462kHz 1200z    | 23/10   | Fair     | 1m40s    |         | PLdn | SAT |
| 13962kHz 1210z    | 23/10   | Fair     | 1m40s    |         | PLdn | SAT |
| 13462kHz 1220z    | 23/10   | Strong   | 1m40s    |         | PLdn | SAT |
| 12162kHz 1230z    | 23/10   | Fair     | 1m40s    |         | PLdn | SAT |
| 11562kHz 1240z    | 23/10   | Weak     | 1m40s    |         | PLdn | SAT |
| 10962kHz 1250z    | 23/10   | Weak     | 1m40s    |         | PLdn | SAT |
| 14462kHz 1200z    | 25/10   | Fair     | 4m28s    |         | PLdn | MON |
| 13962kHz 1210z    | 25/10   | Strong   | 4m28s    |         | PLdn | MON |
| 13462kHz 1220z    | 25/10   | Strong   | 4m28s    |         | PLdn | MON |
| 12162kHz 1230z    | 25/10   | Strong   | 4m28s    |         | PLdn | MON |
| 11562kHz 1240z    | 25/10   | Fair     | 4m28s    |         | PLdn | MON |
| 10962kHz 1250z    | 25/10   | Fair     | 4m28s    |         | PLdn | MON |
| 14462kHz 1200z    | 30/10   | Strong   | 4m28s    |         | PLdn | SAT |
| 13962kHz 1210z    | 30/10   | Strong   | 4m28s    |         | PLdn | SAT |
| 13462kHz 1220z    | 30/10   | Strong   |          | QRM3    | PLdn | SAT |
| 12162kHz 1230z    | 30/10   | Fair     |          | QRM2    | PLdn | SAT |
| 11562kHz 1240z    | 30/10   | Weak     | 4m28s    |         | PLdn | SAT |
| 10962kHz 1250z    | 30/10   | Weak     | 4m28s    |         | PLdn | SAT |
| Wednesday/Saturd  | lay     |          |          |         |      |     |
| Sept 2021         |         |          |          |         |      |     |
| [fm Ary/H-FD with | thanksl |          |          |         |      |     |
| 13521 01-09-2021  | -       | 1 MFSK-1 | 6 Russia | n intel | Ary  | WED |
| 13/21 01-09-2021  |         |          |          |         | Δrv  | WED |

| [fm Ary/H-FD with t | thanksl     |            |                |        |      |
|---------------------|-------------|------------|----------------|--------|------|
| 13521 01-09-2021 1  | -           | MFSK-16    | Russian intel. | Ary    | WED  |
| 13421 01-09-2021 1  |             |            |                | Ary    | WED  |
| 12221 01-09-2021 1  |             |            |                | Ary    | WED  |
| 11521 01-09-2021 1  |             |            |                | Ary    | WED  |
| 11021 01-09-2021 1  |             |            |                | Ary    | WED  |
| 10521 01-09-2021 1  |             |            |                | Ary    | WED  |
| 10321 01 07 2021 1  | 130 711 151 | WII SIC 10 | Russian mer.   | 7 Hy   | WED  |
| 13521kHz 1100z      | 04/09       | Strong     | m28s           | PLdn   | SAT  |
| 13421kHz 1110z      | 04/09       | Strong     | m28s           | PLdn   | SAT  |
| 12221kHz 1120z      | 04/09       | Fair       | m28s QRM3      | PLdn   | SAT  |
| 11521kHz 1130z      | 04/09       | Fair       | m28s QRM3      | PLdn   | SAT  |
| 11021kHz 1140z      | 04/09       | Fair       | m28s QRM3      | PLdn   | SAT  |
| 10521kHz 1150z      | 04/09       | NRH        | MIZOS QKWIS    | PLdn   | SAT  |
| 10321KHZ 1130Z      | 04/07       | INICII     |                | T Edil | SAI  |
| 13521kHz 1100z      | 08/09       | Fair       | m28s           | PLdn   | WED  |
| 13421kHz 1110z      | 08/09       | Fair       | m28s QRM2      | PLdn   | WED  |
| 12221kHz 1120z      | 08/09       | Fair       | m28s           | PLdn   | WED  |
| 11521kHz 1130z      | 08/09       | Fair       | m28s QRM2      | PLdn   | WED  |
| 11021kHz 1140z      | 08/09       | Fair       | m28s QRM2      | PLdn   | WED  |
| 10521kHz 1150z      | 08/09       | Weak       | m28s           | PLdn   | WED  |
| 10321KHZ 1130Z      | 00/07       | Weak       | 111203         | T Edil | WLD  |
| 13521 11-09-2021 1  | 100 XPB1    | MFSK-16    | Russian intel  | Ary    | SAT  |
| 13421 11-09-2021 1  |             |            |                | Ary    | SAT  |
| 12221 11-09-2021 1  |             |            |                | Ary    | SAT  |
| 11521 11-09-2021 1  |             |            |                | Ary    | SAT  |
| 11021 11-09-2021 1  |             |            |                | Ary    | SAT  |
| 10521 11-09-2021 1  |             |            |                | Ary    | SAT  |
| 10321 11 07 2021 1  | 130 111 151 | MI DIL 10  | Aussian inter- | 1117   | 5711 |
| 13521kHz 1100z      | 15/09       | Weak       | tm15s          | PLdn   | WED  |
| 13421kHz 1110z      | 15/09       | Fair       | m15s           | PLdn   | WED  |
| 12221kHz 1120z      | 15/09       | Fair       | m15s           | PLdn   | WED  |
| 11521kHz 1130z      | 15/09       | Fair       | m15s           | PLdn   | WED  |
| 11021kHz 1140z      | 15/09       | Weak       | m15s           | PLdn   | WED  |
| 10521kHz 1150z      | 15/09       | Weak       | m15s           | PLdn   | WED  |
|                     |             |            |                |        |      |
| 18/09/2021          | MISSED      |            |                |        |      |
|                     |             |            |                |        |      |
| 13521kHz 1100z      | 22/09       | Weak       | m28s           | PLdn   | WED  |
| 13421kHz 1110z      | 22/09       | Weak       | m28s           | PLdn   | WED  |
| 12221kHz 1120z      | 22/09       | Fair       | m28s           | PLdn   | WED  |
| 11521kHz 1130z      | 22/09       | Fair       | m28s           | PLdn   | WED  |
| 11021kHz 1140z      | 22/09       | Fair       | m28s           | PLdn   | WED  |
| 10521kHz 1150z      | 22/09       | Fair       | m28s           | PLdn   | WED  |
|                     |             |            |                |        |      |
| 13521kHz 1100z      | 25/09       | Fair       | m28s           | PLdn   | SAT  |
| 13421kHz 1110z      | 25/09       | Fair       | m28s           | PLdn   | SAT  |
| 12221kHz 1120z      | 25/09       | Strong     | m28s           | PLdn   | SAT  |
| 11521kHz 1130z      | 25/09       | Strong     | m28s           | PLdn   | SAT  |
| 11021kHz 1140z      | 25/09       | Strong     | m28s           | PLdn   | SAT  |
| 10521kHz 1150z      | 25/09       | Fair       | m28s           | PLdn   | SAT  |
|                     |             |            |                |        |      |
|                     |             |            |                |        |      |

| 13521kHz 1100z               | 29/09         | Strong       | 4m28s    |          | PLdn   | WED  |
|------------------------------|---------------|--------------|----------|----------|--------|------|
| 13421kHz 1110z               | 29/09         | Strong       | 4m28s    |          | PLdn   | WED  |
| 12221kHz 1120z               | 29/09         | Fair         | 4m28s    |          | PLdn   | WED  |
| 11521kHz 1130z               |               | Weak         | 4m28s    |          | PLdn   | WED  |
|                              | 29/09         |              |          |          |        |      |
| 11021kHz 1140z               | 29/09         | Weak         | 4m28s    | OPM2     | PLdn   | WED  |
| 10521kHz 1150z               | 29/09         | Weak         | 4m28s    | QRM3     | PLdn   | WED  |
|                              |               |              |          |          |        |      |
| October 2021                 |               |              |          |          |        |      |
| 16245 02 10 2021             | 1100 VDD1     | MECV 14      | <b>S</b> |          | A em ; | CAT  |
| 16245 02-10-2021             |               |              |          |          | Ary    | SAT  |
| 15825 02-10-2021             |               |              |          |          | Ary    | SAT  |
| 14925 02-10-2021             |               |              |          |          | Ary    | SAT  |
| 13525 02-10-2021             |               |              |          |          | Ary    | SAT  |
| 12125 02-10-2021             |               |              |          |          | Ary    | SAT  |
| 11425 02-10-2021             |               |              |          |          | Ary    | SAT  |
| [Mni Tnx Ary, PLdr           | 1 off watch t | antii 03/10] |          |          |        |      |
| 16425kHz 1100z               | 06/10         | NRH          |          |          | PLdn   | WED  |
| 15825kHz 1110z               | 06/10         | Weak         | 1m40s    |          | PLdn   | WED  |
| 14925kHz 1120z               | 06/10         | Weak         | 1m40s    |          | PLdn   | WED  |
|                              |               |              |          |          | PLdn   |      |
| 13525kHz 1130z               | 06/10         | Strong       | 1m40s    |          |        | WED  |
| 12125kHz 1140z               | 06/10         | Strong       | 1m40s    |          | PLdn   | WED  |
| 11425kHz 1150z               | 06/10         | Strong       | 1m40s    |          | PLdn   | WED  |
| 16425kHz 1100z               | 09/10         | NRH          |          |          | PLdn   | SAT  |
| 15825kHz 1110z               |               |              | 1m40a    | BCQRM2   |        |      |
|                              | 09/10         | Weak         |          | DCQ/MVI2 | PLdn   | SAT  |
| 14925kHz 1120z               | 09/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 13525kHz 1130z               | 09/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 12125kHz 1140z               | 09/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 11425kHz 1150z               | 09/10         | Weak         | 1m40s    |          | PLdn   | SAT  |
| 16425kHz 1100z               | 13/10         | NRH          |          |          | PLdn   | WED  |
|                              |               |              | 1 10-    |          |        |      |
| 15825kHz 1110z               | 13/10         | Fair         | 1m40s    | ODI (A   | PLdn   | WED  |
| 14925kHz 1120z               | 13/10         | Fair         |          | QRM3     | PLdn   | WED  |
| 13525kHz 1130z               | 13/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 12125kHz 1140z               | 13/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 11425kHz 1150z               | 13/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 162451 <sub>2</sub> Hz 1100z | 16/10         | NIDLI        |          |          | DI da  | CAT  |
| 16245kHz 1100z               | 16/10         | NRH          | 1 10-    |          | PLdn   | SAT  |
| 15825kHz 1110z               | 16/10         | Fair         | 1m40s    |          | PLdn   | SAT  |
| 14925kHz 1120z               | 16/10         | Fair         | 1m40s    |          | PLdn   | SAT  |
| 13525kHz 1130z               | 16/10         | Fair         |          | QRM3     | PLdn   | SAT  |
| 12125kHz 1140z               | 16/10         | Fair         | 1m40s    |          | PLdn   | SAT  |
| 11425kHz 1150z               | 16/10         | Fair         | 1m40s    |          | PLdn   | SAT  |
| 164251-Hz 1100z              | 20/10         | NDH          |          |          | DI da  | WED  |
| 16425kHz 1100z               | 20/10         | NRH          | 420-     |          | PLdn   | WED  |
| 15825kHz 1110z               | 20/10         | Weak         | 4m28s    |          | PLdn   | WED  |
| 14925kHz 1120z               | 20/10         | Strong       | 4m28s    |          | PLdn   | WED  |
| 13525kHz 1130z               | 20/10         | Strong       | 4m28s    |          | PLdn   | WED  |
| 12125kHz 1140z               | 20/10         | Strong       | 4m28s    |          | PLdn   | WED  |
| 11425kHz 1150z               | 20/10         | Weak         | 4m28s    |          | PLdn   | WED  |
| 16245kHz 1100z               | 23/10         | NRH          |          |          | PLdn   | SAT  |
|                              |               |              | 420-     |          |        |      |
| 15825kHz 1110z               | 23/10         | Weak         | 4m28s    |          | PLdn   | SAT  |
| 14925kHz 1120z               | 23/10         | Fair         | 4m28s    |          | PLdn   | SAT  |
| 13525kHz 1130z               | 23/10         | Strong       | 4m28s    |          | PLdn   | SAT  |
| 12125kHz 1140z               | 23/10         | Strong       | 4m28s    |          | PLdn   | SAT  |
| 11425kHz 1150z               | 23/10         | Strong       | 4m28s    |          | PLdn   | SAT  |
| 164951-11- 1100              | 27/10         | NIDII        |          |          | DI da  | WIED |
| 16425kHz 1100z               | 27/10         | NRH          | 1 40     |          | PLdn   | WED  |
| 15825kHz 1110z               | 27/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 14925kHz 1120z               | 27/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 13525kHz 1130z               | 27/10         | Strong       | 1m40s    |          | PLdn   | WED  |
| 12125kHz 1140z               | 27/10         | Strong       | 1m40s    |          | PLdn   | WED  |
| 11425kHz 1150z               | 27/10         | Fair         | 1m40s    |          | PLdn   | WED  |
| 16/25bHz 1100z               | 30/10         | NDU          |          |          | PI dn  | SAT  |
| 16425kHz 1100z               | 30/10         | NRH          | 1 40     |          | PLdn   | SAT  |
| 15825kHz 1110z               | 30/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 14925kHz 1120z               | 30/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 13525kHz 1130z               | 30/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 12125kHz 1140z               | 30/10         | Strong       | 1m40s    |          | PLdn   | SAT  |
| 11425kHz 1150z               | 30/10         | Strong       | 1m40s    | QRM2     | PLdn   | SAT  |
|                              |               |              |          |          |        |      |

### Other XPB1 [H-FD]:

1B XPB1 Sat 02.10.2021 1200Z 14462 msg Sat 02.10.2021 1210Z 13962 msg Sat 02.10.2021 1220Z 13462 msg Sat 02.10.2021 1220Z 13462 msg Sat 02.10.2021 1230Z 12162 msg Sat 02.10.2021 1240Z 11562 msg Sat 02.10.2021 1250Z 10962 msg

Tue 05.10.2021 0500Z 13471 msg 4:30 Tue 05.10.2021 0510Z 14771 msg Tue 05.10.2021 0520Z 15871 msg Tue 05.10.2021 0530Z 16271 msg Tue 05.10.2021 0540Z 17471 msg

### HM01/SK01 Hybrid

One report seen elsewhere - unsubstantiated and not reported here.

## X06 Mazielka (1c) logs section

First I have to do some corrections to the last report:

On August 3rd, the groups were missing in both logs. Here they are completely: 20210803 Tue 0803-0805 13524 125643 Edd TX to Ulanbatar, fair, i. p., G317 (SDR) 20210803 Tue 0805-0808 15836 165423 Edd TX to Brussels, good, i. p., G12 (SDR)

Please ignore the 2<sup>nd</sup> footer. It referred to an uncomplete log, which Paul and I deleted – but I didn't think of the footer I wrote; sorry, my mistakes! The next report will be better, here it is:

This time we have more logs than last time:

```
Day UTC
                      Freq Scale Monitor
                                               Comments
20210901 Wed 0700-0705 12150 256341 Schorschi
                                               TX to Beirut, S9, G311
20210901 Wed 1111
                      16115 215346 HFD
                                               TX to Mumbai, G25
20210904 Sat 1307
                      15928 1--6-- XAH
                                              Strong X06b i. p. before E07
20210911 Sat 1008
                      13521 1--6-- Schorschi Strong X06b before XPB1
20210913 Mon 0824-0825 9215 421635 Ary/NL
                                               TX to Oslo, i. p., G74
20210919 Sun 0700-0711 12130 452163 Edd Smith TX to Kabul, i. p., G403 (SDR)
20210921 Tue 0759
                    12174 154632 Edd
                                               Shortie i.p., rare scale, G427 (SDR)
20210921 Tue 0759-0810 12157 165423 Edd
                                               TX to Brussels, i. p., G151 (SDR)
20210921 Tue 0803-0805 13524 125643 Edd
                                               TX to Ulanbatar, i. p., G383 (SDR)
                                               TX to Ashgabat, i. p., G234 (SDR)
20210928 Tue 1004-1006 11025 612534 Edd
20211004 Mon 0646-0650 10161 165324 Ary
                                               TX to Vienna, G1
20211004 Mon 0734
                     11562 432516 Ary
                                              TX to Bern, i. p., G6(1)
20211004 Mon 0817-0819 13395 532614 Edd
                                              TX to Paris, i. p., G4 (SDR)
20211005 Tue 0756-0803 14615 125643 Ary
                                              TX to Ulanbatar, i. p., G317
                                               TX to Rome, i. p., G7
20211005 Tue 0825-0835 15687 154263 Ary
20211005 Tue 0922-0924 18206 246531 Ary
                                               TX to Accra, i. p., G16
20211005 Tue 1148-1149 11550 1--6-- Edd
                                              X06b i. p. (SDR)
20211005 Tue 1152-1202 16340 1--6-- Edd
                                              X06b i. p. (SDR)
20211005 Tue 1201-1202 16188 325614 Edd
                                              Alert 2 (TX to Nairobi, G392) 1
                                               2.2 (i. p. via SDR like 2.1)
20211005 Tue 1204-1207 14942 325614 Edd
20211006 Wed 0829-0831 14631 362154 Ary
                                               TX to Athens, i. p., G32
20211007 Thu 0713
                      19511 314265 Ary
                                               TX to Antananarivo, i. p., G380(1)
20211007 Thu 1335-1337 16277 436512 Daniel/DE TX to Harare, strong, i. p., G44
20211007 Thu 1622
                      12161 1---- Schorschi X06b single tone (only some secs)
20211014 Thu 1359-1404 13338 564213 Ary
                                              TX to Bonn, G118
20211019 Tue 1058-1102 14812 246531 Ary
                                               TX to Accra, G153
20211020 Wed 1039
                      11125 1-6-16 Ary
                                               X06b shortie (only 6x sent)
20211027 Wed 0810
                      13419 465132 Ary
                                               TX to Sofia, i. p., G246(2)
```

- 1) No end time
- 2) Under RTTY, hard to hear, no end time

STOP PRESS= PoSW also sent results in:

```
X06 6-Tone Repeating:-
Several of these heard by chance in September, not many in October:-
13-Sept-21, Monday:- 0814 UTC, 9215 kHz, weak signal, stopped after 0825z.

17-Sept-21, Friday:- 0511 UTC, 12200 kHz, good signal, went off a couple of minutes after being tuned in.

21-Sept-21, Tuesday:- 0758 UTC, 12157 kHz, very strong, went off after 0811z.

28-Sept-21, Tuesday:- 1819 UTC, 7680 kHz, S5-S6, went off after 1827z
1830 UTC, 6850 kHz, appeared to be the same tones, strong signal, stopped just before 1839z, carrier off shortly after.
```

29-Sept-21, Wednesday: 0633 UTC, 14720 kHz, S6-S7, went off 0640:30s approx.

0643 UTC, 12200 kHz, same tones, S5-S6, went off after 0649z.

6-Oct-21, Wednesday:- 0642 UTC, 12150 kHz, strong signal, went off shortly after being tuned in.

Many thanks to all contributors as usual. Till EN 128 I say good-bye - and please stay healthy!

Jochen, the Numbers-, X06 Database and Teamkopf

## \*Thank you to all our contributors\*

## Giv us a Job!

GCHQ uses Instagram and Reddit in new recruitment drive for cyber spies ahead of application deadline

**Q&A** sessions with cyber operatives are being used to encourage people to submit applications by the September 7 deadline.

ByLinda HowardMoney and Consumer Writer 07:53, 7 SEP 2021UPDATED08:09, 7 SEP 2021

https://www.dailyrecord.co.uk/lifestyle/money/gchq-social-media-recruitment-drive-24924646?utm\_source=sharebar&utm\_medium=email&utm\_campaign=sharebar

GCHQ has turned to social media in place of the traditional "tap on the shoulder" approach as part of its biggest ever recruitment drive for cyber operations.

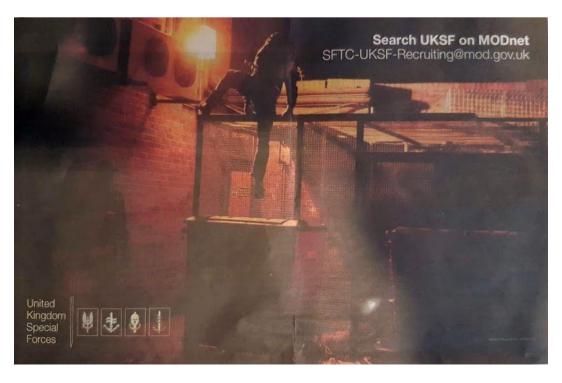
The agency's cyber spies have been allowed to lift the lid on their roles in the first-ever Reddit and Instagram Q&A sessions, in a bid to attract more creative people with a Stem (science, technology, engineering and mathematics) degree, from diverse backgrounds across the UK>.

Cyber operatives using the names Anika and Jane have been taking questions from the public on Reddit since August, ahead of the looming September 7 deadline for applications.

"Thankfully we're past the point of having to surreptitiously tap people on the shoulder," Anika responded to one interested user.

"Today we're a click of a mouse away."

https://www.dailyrecord.co.uk/lifestyle/money/gchq-social-media-recruitment-drive-24924646?utm\_source=sharebar&utm\_medium=email&utm\_campaign=sharebar



### MI6 warns James Bond wannabes spy work 'isn't about high-speed chases and poker'\*

Secret service roles both at home and abroad are being advertised on job sites now – just days before the release of Daniel Craig's final Bond outing in No Time To Die

The MI6 is advertising new jobs(PA) By Norman Silvester 18:11, 25 Sep 2021

https://www.mirror.co.uk/news/uk-news/mi6-warns-james-bond-wannabes-25072196.amp?utm\_source=twitter.com&utm\_medium=social&utm\_campaign=sharebar

MI6 is on the lookout for new spies – but has warned James Bond wannabes the role won't be what they ex-Spectre.

Fast cars and fancy cocktails are out, replaced by office desks, staff socials and baking contests.

Secret service roles both at home and abroad are being advertised on job sites now – just days before the release of Daniel Craig's final Bond outing in No Time To

One ad says: "Our work isn't about high-speed chases or high-stakes poker. It's not danger and dry martinis. We don't put our people in situations that would threaten them.

"Your work will look much like any office role. We've even got social events from bake-offs to photography competitions.

"You're part of a diverse and inclusive community of support. We're not looking for action heroes."

https://www.mirror.co.uk/news/uk-news/mi6-warns-james-bond-wannabes-25072196.amp?utm\_source=twitter.com&utm\_medium=social&utm\_campaign=sharebar

\*Common bloody sense if you ask us!

### PoSW's Items of Interest in the Media

Ever since the Covid 19 virus became "a thing" I have tried to avoid the mainstream media as much as possible. Back in March of 2020 when we were being made to queue at the supermarket two metres apart and the security guards were strutting up and down and shouting at us I expressed my displeasure to the woman at the checkout who told me not to worry and that things would be back to normal in a few weeks.

I replied that this would not be the case, you could tell from the body language and the smug looks on the faces of the politicians when they made their daily TV statements that this was going to be far more than defeating a virus. And thus, almost two years down the road, it has proved to be.

There is much talk of what the Political Class are calling the "Great Reset", which is going to give them the kind of control over us that they have always wanted, the "vaccine passport", that is evidence of having been vaccinated with, seemingly, a never-ending routine of booster vaccinations every few weeks to be used as a *de facto* internal passport and is tied in with the fascination our Political Class have with China's "Social Credit" system where a person's access to housing, healthcare, travel - and just about everything else that makes for a worthwhile existence depends on doing as you are told by the politicians.

Couple with that with their obsession with taking away our economical natural gas heating systems and replacing them with ground source heat pumps together with getting rid of reasonably costed petrol and diesel powered vehicles and making everyone buy extremely expensive electric cars, the future is looking grim indeed.

So, having only purchased one newspaper in the last two months, a copy of the *I* on 29-September, there was only one very short item with links to the world of espionage and military matters. "No plan to attack China, says General", Which says, "A top US military officer told Congress that he knew Donald Trump was not planning to attack China and it was his job to reassure the Chinese. General Mark Milley, chairman of the Joint Chiefs of Staff, defended two calls he made to his Chinese counterpart over China's concern about a US attack."

Point to ponder:- "Man that is born of a woman hath but a short time to live, and is full of misery" - from The Order for the Burial of the Dead, The book of Common Prayer,

# **Happy Christmas Comrades!**

# **Chart Section Index**

- 1. Prediction Chart
- 2. M01 Schedule
- 3. Family III
- 4. XPA1 schedule c XPA2 schedules m and p

## November 2021

| Mon | Tue | Wed | Thu | Fri | Sat | Sun | UTC            | wk | Stn  | Fam   | Nov                        | Dec                      |
|-----|-----|-----|-----|-----|-----|-----|----------------|----|------|-------|----------------------------|--------------------------|
|     |     |     |     |     | Ŋ   | Ŋ   |                |    |      |       |                            | kHz, ID,                 |
| X   | Х   | Х   | X   | Х   |     |     | 0000           |    | F01  | 01A   | 17471                      | 17471                    |
| Х   |     |     |     | Х   |     |     | 0010/0030/0050 |    | M12  | 01B   | 16275/15975/14675<br>296   | 14947/13447/12147<br>941 |
| Х   |     |     |     | Х   |     |     | 0025/0035      |    | F01  | 01A   | 12101/ 9215                | 10884/ 8157              |
|     | 37  |     |     | 37  |     |     | 0030/0050/0110 |    | M12  | 01B   | 6874/ 8074/ 9374           | 6832/ 7532/ 8132         |
|     | Х   |     |     | Х   |     |     | 0030/0030/0110 |    | MIZ  | OID   | 803                        | 851                      |
|     | Х   |     | Х   |     |     |     | 0100/0120/0140 |    | M12  | 01B   | 15831/14431/13431<br>844   | 15956/14756/13456<br>974 |
| Х   |     |     |     | Х   |     |     | 0125/0135      |    | F01  | 01A   | 12101/ 9215                | 10884/ 8157              |
|     |     |     |     |     |     | Х   | 0100/0120/0140 |    | V07  | 01B   | 15946/14846/13486<br>984   | 11594/10794/10194<br>571 |
|     |     |     | Х   |     |     | Х   | 0110/0130/0150 |    | M12  | 01B   | 11054/10754/ 9254          | 9379/ 8179/ 7479         |
|     |     |     |     |     |     |     | 0200           |    | V13  | 0     | 972<br>13750               | 314<br>13750             |
| Х   | X   | X   | X   | Х   | X   | X   | 0200           |    | V13  | U     | 10673/14398                | 9382/13426               |
| Х   |     |     |     |     |     |     | 0210/0310      |    | E06  | 01A   | 537                        | 537                      |
| Х   |     |     |     | Х   |     |     | 0300           |    | E11  | 03    | 10                         | 1.0                      |
|     |     |     |     |     |     |     |                |    |      |       | 18#, search<br>16163/13863 | 18#<br>14654/12177       |
|     |     |     | Х   | Х   |     |     | 0300/0400      |    | E06  | 01A   | 361                        | 361                      |
| Х   | Х   | Х   | Х   | Х   | 37  | 37  | 0300           |    | V13  | 0     | 13750                      | 13750                    |
|     | Λ   | Λ   |     | ^   |     |     | 0300           |    | V13  | 0     | x5779                      | x5779                    |
|     |     | Х   | Х   |     |     |     | 0315           |    | E11  | 03    | 25#, search                | 25#                      |
| X   | Х   | Х   | Х   | Х   | v   | v   | 0400           |    | V13  | 0     | 11430                      | 11430                    |
|     | Λ   | Λ   |     | Λ   |     |     | 0400           |    | V15  | 0     | 11616/ 9322                | 11616/ 9322              |
| Х   | Х   | Х   | Х   | Х   |     |     | 0400/0420      |    | S06  | 01A   | 480                        | 480                      |
|     |     |     |     |     |     |     | 0.4 5 0        |    | p11  | 03    | 4909                       | 4909                     |
| Х   |     |     |     |     |     |     | 0450           |    | E11  | 0.3   | 41#                        | 41#                      |
| Х   |     | Х   |     | Х   |     | Х   | 0455           |    | HM01 | 18    | 10860                      | 10860                    |
|     | Х   |     | Х   |     | Х   |     | 0455           |    | HM01 | 18    | 11462                      | 11462                    |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0500           |    | V13  | 0     | 11430                      | 15388                    |
|     | Х   |     | Х   |     |     |     | 0500           |    | S11A | 03    | 38#, search                | 38#                      |
| X   | Х   | Х   | Х   | Х   |     |     | 0500/0520      |    | M14  | 01A   | 12211/10243                | 12211/10243              |
|     |     |     |     |     |     |     |                |    |      |       | 952                        | 952                      |
| Х   |     | Х   |     |     |     |     | 0510           |    | S11A | 03    | 65#                        | 65#                      |
|     |     |     |     |     |     |     |                |    |      |       | 9441                       | 9441                     |
|     | Х   |     |     | X   |     |     | 0530           |    | M01A | 14    | 751                        | 751                      |
|     |     |     |     |     |     |     |                |    |      |       | 9129 or 9192               | 9129 or 9192             |
|     |     | Х   | Х   |     |     |     | 0530           |    | M01A | 14    | 498                        | 498                      |
|     |     |     |     |     |     |     | 0500/0550/0610 |    | 1 0  | 0.1-  | 9317/10484/11552           |                          |
|     | Х   |     |     |     |     |     | 0530/0550/0610 |    | M12  | 01B   | 135                        | 135                      |
|     |     |     | Х   |     |     |     | 0530/0550/0610 |    | E07A | 01B   | 5111/ 5811/ 6911           |                          |
|     |     |     |     |     |     |     |                |    |      |       | 189<br>7692                | 189<br>7692              |
|     |     | Х   | Х   |     |     |     | 0540           |    | M01A | 14    | 536                        | 536                      |
| Х   |     | Х   |     | Х   |     | Х   | 0555           |    | HM01 | 18    | 10345                      | 10345                    |
|     | Х   |     | Х   |     | Х   |     | 0555           |    | HM01 | 18    | 14375                      | 14375                    |
|     |     |     |     |     |     |     |                |    |      |       | x6280                      | x6280                    |
|     |     |     |     | Х   |     | Х   | 0600           |    | E11  | 03    | 35#, search                | 35#                      |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0600           |    | V13  | 0     | 11430                      | 15388                    |
|     |     |     |     |     |     |     |                |    |      | 0.1 - | 16145/14240                | 16145/14240              |
|     | Х   |     |     |     |     |     | 0600/0610      |    | S06S | 01A   | 438                        | 438                      |

| Mon | Tue | Wed | Thu | Fri | Sat | Sun | UTC                              | wk  | Stn          | Fam      | Nov<br>kHz, ID,            | Dec kHz, ID,                                    |
|-----|-----|-----|-----|-----|-----|-----|----------------------------------|-----|--------------|----------|----------------------------|---|
| х   | Х   |     |     |     |     |     | 0600/0610/0620<br>0630/0640/0650 |     | XPB1         | 01B      | 13446/14446/14946          | 12118/13418/13918<br>14418/14918/15918<br>check |
|     |     |     | Х   | Х   |     |     | 0600/0700                        | 1/3 | E06          | 01B      | 18285/20140<br>507         | 14575/17420<br>923                              |
|     | Х   |     |     | Х   |     |     | 0620                             |     | M01A         | 14       | 10233 or 10235<br>354/458  | 10233 or 10235<br>354/458                       |
|     |     | Х   | Х   |     |     |     | 0620                             |     | M01A         | 14       | 9421<br>135                | 9421<br>135                                     |
|     | Х   |     |     | Х   |     |     | 0630                             |     | M01A         | 14       | 9447<br>143/796            | 9447<br>143/796                                 |
|     |     | Х   | Х   |     |     |     | 0630                             |     | M01A         | 14       | 8111<br>902/536            | 8111<br>902/536                                 |
| Х   |     |     |     |     |     |     | 0630/0640                        |     | S06S         | 01A      | 13470/16515<br>462, check  | 13470/16515<br>462                              |
| Х   |     | Х   |     |     |     |     | 0640                             |     | E11          | 03       | 11450<br>94#, <b>check</b> | 11450<br>94#                                    |
|     | Х   |     | Х   |     |     |     | 0645                             |     | E11          | 03       | 7840<br>51#                | 7840<br>51#                                     |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0655<br>0655                     |     | HM01<br>HM01 | 18<br>18 | 9330<br>13435              | 9330<br>13435                                   |
| Х   | 21  |     | X   |     | 21  |     | 0700                             |     | S11A         | 03       | 9050                       | 9050  |
|     | Х   |     |     | Х   |     |     | 0700                             |     | E11          | 03       | 6804<br>57#                | 6804<br>57#                                     |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0700                             |     | V13          | 0        | 15250                      | 18040   |
|     |     |     |     |     |     | Х   | 0700                             |     | M01          | 01B      | 5465<br>197                | 5465<br>197                                     |
|     | Х   |     |     |     |     |     | 0700/0710                        |     | S06S         | 01A      | 5250/ 6320<br>452          | 5250/ 6320<br>452                               |
|     | Х   |     |     | Х   |     |     | 0700/0720/0740                   |     | E07          | 01B      |                            | 14364/14964/15964<br>399                        |
|     |     |     |     |     |     | Х   | 0700/0720/0740                   |     | E07          | 01B      | 10268/11068/12168<br>201   | 9326/10426/11526<br>345                         |
|     | Х   |     |     | Х   |     |     | 0710                             |     | M01A         | 14       | 10651<br>297/358           | 10651<br>297/358                                |
|     |     | Х   | Х   |     |     |     | 0710                             |     | M01A         | 14       | 9175<br>146/208            | 9175<br>146/208                                 |
| Х   |     | Х   |     |     |     |     | 0715                             |     | E11          | 03       | 75#, search                | 75#   |
|     | х   |     |     | х   |     |     | 0715                             |     | E11          | 03       | 9130<br>63#                | 9130<br>63#                                     |
|     | Х   |     |     | Х   |     |     | 0720                             |     | M01A         | 14       | 9151<br>728                | 9151<br>728                                     |
|     |     |     |     |     | Х   | Х   | 0730                             |     | E11          | 03       | x4505<br>49#, search       | x4505<br>49#                                    |
| Х   | Х   |     |     |     |     |     | 0730/0740                        |     | S06S         | 01A      | 7410/11532<br>427          | 7410/11532<br>427                               |
| Х   |     |     | Х   |     |     |     | 0745                             |     | E11          | 03       | 10213<br>26#               | 10213<br>26#                                    |
|     | Х   |     | Х   |     |     |     | 0745                             |     | E11          | 03       | 13908<br>22#               | 13908<br>22#                                    |
|     |     | Х   |     | Х   |     |     | 0745                             |     | E11          | 03       | 17378<br>34#               | 17378<br>34#                                    |
| Х   |     | Х   |     | Х   |     | Х   | 0755                             |     | HM01         | 18       | 9065                       | 9065  |

| Mon | Tue | Wed | Thu | Fri | Sat | Sun | UTC            | wk | Stn  | Fam | Nov kHz, ID,                              | Dec kHz, ID,                            |
|-----|-----|-----|-----|-----|-----|-----|----------------|----|------|-----|---|---|
|     | Х   |     | Х   |     | Х   |     | 0755           |    | HM01 | 18  | 11365                                     | 11365                                   |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0800           |    | V13  | 0   | 15250                                     | 18040                                   |
|     |     |     | Х   |     |     |     | 0800/0810      |    | E17Z | 01A | 11170, 9820<br>217                        | 11170, 9820<br>217                      |
|     | Х   |     |     |     |     |     | 0800/0810      |    | S06S | 01A | 11945/13195<br>127                        | 11945/13195<br>127                      |
|     |     |     |     |     | Х   |     | 0800/0810      | 1  | S06S | 01A | 8680/ 8260<br>132                         | 8680/ 8260<br>132                       |
|     |     | Х   |     |     |     | Х   | 0800/0820/0840 |    | M12  | 01B | 17432/18532/19132<br>451                  | 16234/17434/18234<br>242                |
|     |     | Х   |     |     |     |     | 0800/0820/0840 |    | XPA2 | 01B | 11529/13429/13929                         | 11493/13393/13993                       |
|     | Х   |     | Х   |     |     |     | 0810/0830/0850 |    | XPA1 | 01B | 13978/14859/15871                         | 11531/12137/13932                       |
|     |     |     | Х   | Х   |     |     | 0820           |    | E11  | 03  | 5149<br>43#                               | 5149<br>43#                             |
|     | Х   | Х   |     |     |     |     | 0820           |    | E11  | 03  | 14611<br>13#                              | 14611<br>13#                            |
|     |     |     |     |     | Х   | Х   | 0830           |    | S11A | 03  | 5371<br>37#, check                        | 5371<br>37#                             |
|     |     |     |     |     |     |     | 0830/0840      |    | S06S | 01A | 8057/ 8530<br>764                         | 8057/ 8530<br>764                       |
| Х   |     | Х   |     |     |     |     | 0830/0840      |    | S06S | 01A | 7062/10532<br>464                         | 7062/10532<br>464                       |
| Х   |     |     | Х   |     |     |     | 0830/0840      |    | S06S | 01A | 11535/11830<br>172                        | 11535/11830<br>172                      |
|     |     |     |     | Х   |     |     | 0830/0840      |    | S06S | 01A | 11040/12153<br>156                        | 11040/12153<br>156                      |
| Х   |     |     | Х   | Х   |     |     | 0830/0930      |    | S06  | 01A | 19875/16067<br>842                        | 17435/14375<br>842                      |
| Х   |     | Х   |     |     |     |     | 0845           |    | E11  | 03  | 12067                                     | 12067                                   |
|     | Х   |     | Х   |     |     |     | 0845           |    | E11  |     | 12089<br>15#                              | 12089<br>15#                            |
|     |     | Х   |     | Х   |     | Х   | 0855           |    | HM01 | 18  | 9240                                      | 9240                                    |
|     | Х   |     | Х   |     | Х   |     | 0855           |    | HM01 | 18  | 11462                                     | 11462                                   |
| Х   |     | Х   |     |     |     |     | 0900           |    | E11  | 03  | 8597<br>53#, <b>check</b>                 | 8597<br>53#                             |
|     |     |     |     |     |     |     | 0900/0910      |    | S06S | 01A | 14675/12830                               | 14675/12830<br>232                      |
|     |     |     |     | Х   |     |     | 0900/0910      |    | S06S | 01A | 5765/ 6315<br>239                         | 5765/ 6315<br>239                       |
|     |     |     |     |     | Х   |     | 0900/0920/0940 |    | E07A | 01B | 11553/12153/13553<br>515                  | 124                                     |
| X   |     | Х   |     |     |     |     | 0910/0930/0950 |    | XPA2 | 01B | 17413/15852/13363                         |   |
|     |     |     | Х   |     | Х   |     | 0910/0930/0950 |    | XPA2 | 01B | 15985/14885/13885                         | 13919/11519/10719                       |
| Х   |     |     |     | Х   |     |     | 0915           |    | S11A | 03  | 6252<br>48#<br>17458<br>617, only 10.+25. | 6252<br>48#<br>17458<br>617 only 10 +25 |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 0930           |    | M14  | 01A | when msg repeat<br>15994 on 11.+26.       | when msg repeat<br>15994 on 11.+26.     |
|     |     | Х   | Х   |     |     |     | 0930           |    | E11  | 03  | 27#                                       | 27#                                     |
| Х   |     |     | Х   |     |     |     | 0930/0940      |    | S06S | 01A | 8812/ 9540<br>698                         | 8812/ 9540<br>698                       |

| Mon | Tue | Wed | Thu | Fri | Sat | Sun | UTC                  | wk | Stn    | Fam   | Nov<br>kHz, ID,                  | Dec kHz, ID,                          |
|-----|-----|-----|-----|-----|-----|-----|----------------------|----|--------|-------|----------------------------------|---------------------------------------|
|     |     |     |     |     |     |     | 0000/1000            |    | - 0.6  | 0.1 - |                                  | 9463/ 7377                            |
|     |     |     |     |     |     | Х   | 0930/1000            |    | S06    | 01A   |                                  | 480                                   |
| Х   |     | Х   |     | Х   |     | Х   | 0955                 |    | HM01   | 18    | 9155                             | 9155                                  |
|     | Х   |     | Х   |     | Х   |     | 0955                 |    | HM01   | 18    | 12180                            | 12180                                 |
|     | х   |     |     | Х   |     |     | 1000                 |    | E11    | 03    | 8597                             | 8597                                  |
|     |     |     |     |     |     |     | 1000                 |    |        |       | 30#, check                       | 30#                                   |
|     | Х   |     |     |     |     |     | 1000/1010            |    | S06S   | 01A   | 6440/ 5660                       | 6440/ 5660                            |
|     |     |     |     |     |     |     |                      |    |        |       | 427                              | 427                                   |
|     |     | Х   |     |     |     |     | 1000/1010            |    | S06S   | 01A   | 12365/14280<br>276, <b>check</b> | 12365/14280<br>276                    |
|     | Х   | Х   | Х   | Х   |     |     | 1015/1025/1035       |    | F01    | 01A   |                                  | 12164/10336/ 8016                     |
|     |     |     |     |     |     |     | 1000                 |    | 0117   | 0.2   | 8102                             | 8102                                  |
|     | Х   |     |     | Х   |     |     | 1020                 |    | S11A   | 03    | 42#                              | 42#                                   |
| 3.7 |     | 37  |     |     |     |     | 1045                 |    | E11    | 03    | 7984                             | 7984                                  |
| Х   |     | Х   |     |     |     |     | 1045                 |    | 17.1.  | 0.5   | 69#                              | 69#                                   |
|     | Х   |     | _   |     |     |     | 1100/1110            |    | S06S   | 01A   | 5035/5975                        | 5035/5975                             |
|     |     |     |     |     |     |     | 1100,1110            |    | 2002   | 0 211 | 265                              | 265                                   |
|     |     |     |     |     |     |     | 1100/1110/1110       |    | _      |       |                                  | 14483/13983/13483                     |
| Х   |     |     |     |     | Х   |     | 1130/1140/1150       |    | XPB1   | 01B   |                                  | 12183/11583/1098 <b>3</b>             |
|     |     |     |     |     |     |     | 1100/1100/1110       |    |        | 0.1 = | check                            | check                                 |
|     | Х   |     |     | Х   |     |     | 1100/1120/1140       |    | XPA2   | 01B   |                                  | 9265/ 8165/ 7665<br>11579/10979/10279 |
|     |     | Х   | X   |     |     |     | 1100/1120/1140       |    | XPA2   | 01B   | 13393/12193/11093                |                                       |
|     |     |     | Х   |     |     |     | 1110/1130/1150       |    | M12    | 01B   | 725                              | 725                                   |
|     |     |     |     |     |     |     | 1000/1000/1040       |    | 141.0  | 015   | 14377/13461/12114                | 14377/13461/12114                     |
| Х   |     |     |     |     |     |     | 1200/1220/1240       |    | M12    | 01B   | 317                              | 317                                   |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 1200                 |    | V13    | 0     | 7502                             | 7688                                  |
| х   |     |     | Х   |     |     |     | 1200/1210            |    | S06S   | 01A   | 12155/10920                      | 12155/10920                           |
| 21  |     |     | 21  |     |     |     |                      |    | 5005   | 0111  | 175                              | 175                                   |
|     |     | Х   |     |     | Х   |     | 1200/1210/1210       |    | XPB1   | 01B   | search                           | search                                |
|     |     |     |     |     |     |     | 1230/1240/1250       |    |        | 0.1 = | 1.4500/1.0000/1.0100             | 10005/1005/10505                      |
|     | Х   |     |     |     |     | X   | 1200/1220/1240       |    |        | 01B   |                                  | 10807/12207/13507                     |
|     |     | Х   |     | Х   |     |     | 1200/1220/1240       |    | XPA2   | 01B   | 10968/12168/13368                | 9389/10289/11589                      |
|     | Х   | Х   |     |     |     |     | 1205                 |    | E11    | 03    | 46#                              | 46#                                   |
|     |     |     |     |     |     |     |                      |    |        |       | 4909                             | 4909                                  |
| Х   |     |     | Х   |     |     |     | 1300                 |    | E11    | 03    | 31#                              | 31#                                   |
| Х   | Х   | Х   | Х   | Х   | Х   | Х   | 1300                 |    | V13    | 0     | 7502, 11430                      | 7688                                  |
|     |     |     |     |     |     |     |                      |    | 0000   | 017   | 8420/10635                       | 8420/10635                            |
| Х   |     |     |     |     |     |     | 1300/1310            |    | S06S   | 01A   | 149                              | 149                                   |
|     |     |     |     |     |     |     | 1200/1220            |    | 006    | 017   |                                  | 6792/ 5380                            |
|     |     |     |     |     | Х   |     | 1300/1330            |    | S06    | 01A   |                                  | 480                                   |
|     |     | Х   |     | Х   |     |     | 1310/1330/1350       |    | XPA1   | 01B   | 13875/13375/10875                | 13465/12165/10265                     |
|     |     | 21  |     | 21  |     |     | 1310/1330/1330       |    | 211111 | OID   | 838                              | 412                                   |
|     |     |     | Х   |     |     | Х   | 1330                 |    | E11    | 03    | 5082                             | 5082                                  |
|     |     |     |     |     |     |     |                      |    | . =    |       | 52#                              | 52#                                   |
|     | Х   |     |     |     | Х   |     | 1345                 |    | E11    | 03    | 13363<br>91#                     | 13363<br>91#                          |
|     |     |     |     |     |     |     |                      |    |        |       | 10323/ 9123/ 8023                |                                       |
|     |     |     |     |     | Х   |     | 1400/1420/1440       |    | E07    | 01B   | 310                              | 345                                   |
|     |     |     |     |     |     |     | 1 41 0 /1 400 /1 450 |    | D07    | 015   | 11574/10274/ 9274                | 10226/ 9226/ 8126                     |
|     |     |     | Х   |     | Х   |     | 1410/1430/1450       |    | E07    | 01B   | 327                              | 674                                   |
|     |     |     |     |     |     |     |                      |    |        |       |                                  |                                       |
|     | Х   | Х   | Х   |     |     |     | 1500/1600            |    | S06    | 01A   | 13397/ 9194                      |                                       |

| Mon | Tue | Wed | Thu | Fri | Sat | Sun | UTC            | wk  | Stn  | Fam | Nov<br>kHz, ID,          | Dec kHz, ID,             |
|-----|-----|-----|-----|-----|-----|-----|----------------|-----|------|-----|--------------------------|--------------------------|
|     |     |     |     |     | Х   |     | 1500           |     | M01  | 14  | 5810<br>197              | 5810<br>197              |
| Х   | Х   |     |     |     |     |     | 1500/1510      |     | S06S | 01A | 6845/ 9170               | 6845/ 9170               |
|     |     |     | *** |     | х   |     | 1510/1530/1550 |     | E07  | 01B | 914<br>search            | 914<br>search            |
|     |     |     | Х   |     | X   |     |                |     | -    |     | 5409                     | 5409                     |
|     |     |     | Х   |     |     |     | 1530           |     | E11  | 03  | 26#                      | 26#                      |
|     |     |     |     |     | Х   | Х   | 1530           |     | E11  | 03  | 4909<br>36#              | 4909<br>36#              |
|     | Х   | Х   | Х   | Х   | Х   | x   | 1555           |     | HM01 | 18  | 11435                    | 11435                    |
| Х   |     |     | Х   |     |     |     | 1600/1620/1640 |     | M12  | 01B | search                   | search                   |
|     |     |     |     |     | Х   |     | 1600/1620/1640 |     | XPA2 | 01B | 8126/ 6826/ 5326         | 6984/ 5884/ 4784         |
|     | Х   |     | Х   |     |     |     | 1600/1620/1640 |     | XPA2 | 01B | 10223/ 9223/ 8123        |                          |
|     | Х   |     |     |     |     | Х   | 1605           |     | E11  | 03  | 5344<br>23#              | 5344<br>23#              |
|     |     |     |     | Х   |     |     | 1610/1630/1650 |     | E07A | 01B | 8138/ 7538/ 6838<br>158  |                          |
|     | Х   |     | Х   |     |     |     | 1645           |     | E11  | 03  |                          |                          |
|     |     |     |     |     |     |     |                |     |      |     | 33# search               | 33#                      |
|     |     |     |     | Х   |     | Х   | 1650           |     | E11  | 03  | 6849<br>92#              | 6849<br>92#              |
|     | Х   | Х   | Х   | Х   | Х   | x   | 1655           |     | HM01 | 18  | 11530                    | 11530                    |
|     |     |     | Х   |     |     |     | 1700/1720/1740 |     | M12  | 01B | 12162/11566/1ß711<br>546 | 12162/11566/1ß711<br>546 |
|     |     | Х   |     |     |     |     | 1710/1730/1750 |     | M12  | 01B | 12162/11566/10711        |                          |
|     |     |     |     |     |     |     | 1,10,1,00,1,00 |     | 1112 | 012 | 546<br>5082              | 546<br>5082              |
|     |     | Х   |     |     |     | Х   | 1715           |     | E11  | 03  | 97#                      | 97#                      |
| Х   |     |     | Х   |     |     |     | 1730           |     | E11  | 03  | 5779<br>41#              | 5779<br>41#              |
|     |     |     |     |     |     |     | 1745           |     | D11  | 0.2 | 12924                    | 12924                    |
| X   |     |     |     |     |     |     | 1745           |     | E11  | 03  | 24#                      | 24#                      |
| X   | Х   | Х   | Х   | Х   | Х   | x   | 1755           |     | HM01 | 18  | 11635                    | 11635                    |
|     | Х   |     | Х   |     |     |     | 1800           |     | M01  | 14  | 5320<br>197              | 5320<br>197              |
|     |     | Х   |     |     |     | Х   | 1800/1820/1840 |     | E07  | 01B | 7582/ 6782/ 5182<br>571  |                          |
|     |     |     | Х   |     |     |     | 1800/1820/1840 |     | M12  | 01B |                          | 12162/11566/10711<br>546 |
|     |     |     |     |     |     |     |                |     |      |     | 11486                    | 11486                    |
|     |     | Х   |     |     | Х   |     | 1850           |     | S11A | 03  | 28#                      | 28#                      |
| Х   |     |     | Х   |     |     |     | 1900           |     | E11  | 03  | 6849<br>64#              | 6849<br>64#              |
|     |     | Х   |     |     |     |     | 1900/1920/1940 |     | M12  | 01B | 8047/ 6802/ 5788<br>463  | 8047/ 6802/ 5788<br>463  |
|     |     |     |     | Х   |     |     | 1900/2000      | 1/3 | S06  | 01A | 7553/ 5329<br>768        |                          |
|     |     | Х   |     |     | Х   |     | 1910           |     | E11  | 03  | 4505                     | 4505                     |
|     |     |     |     | Х   |     | ×   | 1910           |     | E11  | 03  | 39#<br>10487             | 39#<br>10487             |
| -   |     |     |     |     |     | -   |                | 1   |      |     | 61#                      | 61#                      |
|     | Х   |     |     | Х   |     |     | 1940/1950/2000 | 1   | F01  | 01A | 8172/ 6791/ 4546<br>4490 | 7684/ 5326/ 4029<br>4490 |
|     | Х   |     | Х   |     |     |     | 2000           |     | M01  | 14  | 197                      | 197                      |

| u   | Φ.  | b  | מו  | .H. | آــ    | п  | TIMO.          | 1-  | Q.b.   |     | Nov               | Dec               |
|-----|-----|----|-----|-----|--------|----|----------------|-----|--------|-----|-------------------|-------------------|
| Mon | Tue | We | Thu | Fri | S<br>S | SL | UTC            | WK  | Stn    | Fam | kHz, ID,          | kHz, ID,          |
|     |     |    |     |     |        |    | 2000/2010/2010 |     |        |     | 7876/ 7576/ 6876  | 8058/ 7558/ 5858  |
|     | Х   |    |     |     |        | Х  | 2030/2040/2050 |     | XPB1   | 01B | 5876/ 5376/ 4476  | 5158/ 4858/ 4458  |
|     |     |    |     |     |        |    | 2030/2040/2030 |     |        |     | check             | check             |
|     |     |    | х   |     |        |    | 2000/2020/2040 |     | M12    | 01B | 14377/13461/12112 | 14377/13461/12112 |
|     |     |    | Λ   |     |        |    | 2000/2020/2040 |     | 1112   | OID | 317               | 317               |
|     |     |    |     | x   |        |    | 2000/2100      | 1/3 | 906    | 01A |                   | 7553/ 5329        |
|     |     |    |     | Λ   |        |    | 2000/2100      | 1/3 | 500    | UIA |                   | 768               |
| Х   |     | Х  |     | Х   |        | Х  | 2055           |     | HM01   | 18  | 11635             | 11635             |
|     | Х   |    | Х   |     | Х      |    | 2055           |     | HM01   | 18  | 16180             | 16180             |
|     |     | x  |     |     |        |    | 2100/2120/2140 |     | E07A   | 01A | 5877/ 5277/ 4577  | 5877/ 5277/ 4577  |
|     |     | Λ  |     |     |        |    | 2100/2120/2140 |     | HO / H | OIA | 825               | 825               |
| Х   |     | Х  |     | Х   |        | Х  | 2155           |     | HM01   | 18  | 10715             | 10715             |
|     | Х   |    | Х   |     | Х      |    | 2155           |     | HM01   | 18  | 17480             | 17480             |
|     |     |    |     | x   | Х      |    | 2200/2220/2240 |     | M12    | 01B | 6859/ 7459/ 9959  | 5832/ 6832/ 7732  |
|     |     |    |     | Λ   | Λ.     |    | 2200/2220/2240 |     | MIZ    | OID | 849               | 887               |
|     |     |    | х   |     |        |    | 2210/2230/2250 |     | M12    | 01B | 6937/ 5737/ 4537  | 6937/ 5737/ 4537  |
|     |     |    | ^   |     |        |    | 2210/2230/2230 |     | MIZ    | OID | 975               | 975               |
|     |     |    |     |     | Х      |    | 2230/2240      |     | F01    | 01A | 20741/18702       | 18169/15765       |
| .,  |     |    | .,  |     |        |    | 2300/2320/2340 |     | M12    | 01B | 10446/ 9046/ 7946 | 9134/ 8134/ 7534  |
| X   |     |    | Х   |     |        |    | 2300/2320/2340 |     | IM T C | OID | 392               | 457               |
|     |     |    |     |     | Х      |    | 2330/2340      |     | F01    | 01A | 20741/18702       | 18169/15765       |

### M01 FREQUENCY LIST

### Frequencies may vary by a few kHz

### JAN FEB NOV DEC

M01/1

**197** 

| DAY       | TIME UTC | FREQ kHz |
|-----------|----------|----------|
| TUE / THU | 1800     | 5320     |
| TUE / THU | 2000     | 4490     |
| SAT       | 1500     | 5810     |
| SUN       | 0700     | 5465     |

### MAR APRIL SEPT OCT

M01/2

463

| DAY       | TIME UTC | FREQ kHz |
|-----------|----------|----------|
| TUE / THU | 1800     | 5475     |
| TUE / THU | 2000     | 5020     |
| SAT       | 1500     | 6260     |
| SUN       | 0700     | 6510     |

### MAY JUNE JULY AUG

M01/3

025

| DAY       | TIME UTC | FREQ kHz |
|-----------|----------|----------|
| TUE / THU | 1800     | 5280     |
| TUE / THU | 2000     | 4905     |
| SAT       | 1500     | 6435     |
| SUN       | 0700     | 6780     |

Updated: 02/04/2014

| Mon | Tue                                   | Thu                                   | Fri | Sat                                     | UTC   | wk Stn   | Fam   | Sep<br>kHz, ID,  | Oct<br>kHz, ID,   | Nov<br>kHz, ID,  | Dec<br>kHz, ID,   | Remarks   |
|-----|---------------------------------------|---------------------------------------|-----|---|---|--|---|--|---|--|---|---|
| х   |                                       | Γ                                     | х   |   | 0300  | E11  | 03  | 18#, search  | 18#   | 18#, search  | 18#   | since 07/15, last log 08/21   |
|     | х                                     | ×                                     |     |   | 0315  | E11  | 03  | 11092<br>25#   | 11092<br>25#  | x5779<br>25#, search   | x5779<br>25#  | since 01/14, last log 09/21   |
| х   |                                       |                                       |     |   | 0450  | E11  | 03  | 5371<br>41#  | 5371<br>41#   | 4909<br>41#  | 4909<br>41#   | since 02/10, last log 10/21<br>2nd transmission Thu 1730z   |
|     | x                                     | х                                     |     |   | 0500  | S11A   | 03  | <b>14769</b><br>38#  | 14769<br>38#  | 38#, search  | 38#   | since 05/14, last log 10/21   |
| х   | x                                     | :                                     |     |   | 0510  | S11A   | 03  | 11116  | 11116   | 9057   | 9057  | since 08/19, last log 10/21   |
| H   |                                       |                                       | x   |   | K 0600  | E11  | 03  | 8680   | 8680  | x6280  | x6280   | since 04/15, last log 10/21   |
| x   | x                                     |                                       |     |   | 0640  | E11  | 03  | 35#<br><b>14865</b>  | 35#<br>14865  | 35#, search<br>11450   | 35#<br>11450  | since 07/17, last log 10/21   |
| Н   | x                                     | x                                     |     |   | 0645  | E11  | 03  | 94#<br>8423  | 94#<br>8423   | 94#, <b>check</b><br>7840  | 94#<br>7840   | since 07/09, last log 10/21   |
|     | ^                                     | x                                     |     | H                                       | 0700  | S11A   | 03  | 51#<br>8597  | 51#<br>8597   | 51#<br>9050  | 51#<br>9050   |   |
| х   |                                       | X                                     |     |   |   |  |   | 47#<br>8180  | 47#<br>8180   | 47#<br>6804  | 47#<br>6804   | since 04/10, last log 10/21   |
|     | x                                     |                                       | х   |   | 0700  | E11  | 03  | 57#<br><b>15632</b>  | 57#<br>15632  | 57#  | 57#   | since 01/12, last log 10/21   |
| х   | х                                     | :                                     |     |   | 0715  | E11  | 03  | 75#<br>9963  | 75#<br>9963   | 75#, search<br>9130  | 75#<br>9130   | since 06/21, last log 10/21   |
|     | х                                     |                                       | х   |   | 0715  | E11  | 03  | 63#<br><b>9079</b>   | 63#   | 63#<br>x4505   | 63#<br>×4505  | since 02/11, last log 10/21   |
|     |                                       |                                       |     | х :                                     | x 0730  | E11  | 03  | 49#  | 49#   | 49#, search  | 49#   | since 07/15, last log 10/21   |
| х   |                                       | х                                     |     |   | 0745  | E11  | 03  | 10213<br>26#   | 10213<br>26#  | 10213<br>26#   | 10213<br>26#  | since 03/14, last log 10/21<br>2nd transmission Thu 1530z   |
|     | x                                     | х                                     |     | $\  \ $                                 | 0745  | E11  | 03  | 14865<br>22#   | 14865<br>22#  | 13908<br>22#   | 13908<br>22#  | since 01/20, last log 10/21   |
|     | х                                     | :                                     | х   |   | 0745  | E11  | 03  | 17410<br>34#   | 17410<br>34#  | 17378<br>34#   | 17378<br>34#  | since 06/17, last log 10/21   |
|     |                                       | х                                     | x   |   | 0820  | E11  | 03  | 5941<br>43#  | 5941<br>43#   | 5149<br>43#  | 5149<br>43#   | since 10/09, last log 10/21   |
| H   | x x                                   |                                       |     |   | 0820  | E11  | 03  | 19184  | 19184   | 14611  | 14611   | since 12/18, last log 10/21   |
| H   |                                       |                                       |     | х :                                     | x 0830  | S11A   | 03  | 6433   | 6433  | 5371   | 5371  | since 02/14, last log 10/21   |
| x   | x                                     |                                       |     |   | 0845  | E11  | 03  | 37#, check<br>12202  | 37#<br>12202  | 37#, check<br>12067  | 37#<br>12067  | since 09/10, last log 10/21   |
|     | x                                     | x                                     |     |   | 0845  | E11  | 03  | 71#<br>12202   | 71#<br>12202  | 71#<br>12089   | 71#<br>12089  | since 07/17, last log 10/21   |
|     |                                       |                                       |     |   |   |  |   | 15#<br><b>9968</b>   | 15#<br>9968   | 15#<br>8597  | 15#<br>8597   |   |
| х   | X                                     | :                                     |     |   | 0900  | E11  | 03  | 53#  | 53#   | 53#, check   | 53#   | since 10/05, last log 10/21   |
| Ħ   |                                       | +                                     |     |   |   |  |   |  |   |  |   |   |
| х   |                                       |                                       | х   |   | 0915  | S11A   | 03  | 6480<br>48#  | 6480<br>48#   | 6252<br>48#  | 6252<br>48#   | since 04/19, last log 10/21   |
| х   | х                                     | x                                     |     |   | 0915  | S11A<br>E11                                      | 03  | 6480<br>48#<br>6940<br>27#   | 6480<br>48#<br>6940<br>27#  | 6252<br>48#<br>7469<br>27#   | 6252<br>48#<br>7469<br>27#  | since 04/19, last log 10/21<br>since 02/14, last log 10/21  |
|     | x                                     | ×                                     |     |   |   |  |   | 6480<br>48#<br>6940<br>27#<br><b>9951</b><br>30#   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#   | since 02/14, last log 10/21<br>since 11/16, last log 10/21  |
|     | -                                     | : x                                   |     |   | 0930  | E11  | 03  | 6480<br>48#<br>6940<br>27#<br><b>9951</b>  | 6480<br>48#<br>6940<br>27#<br>9951  | 6252<br>48#<br>7469<br>27#<br>8597   | 6252<br>48#<br>7469<br>27#<br>8597  | since 02/14, last log 10/21   |
|     | х                                     |                                       |     |   | 0930  | E11  | 03  | 6480<br>48#<br>6940<br>27#<br><b>9951</b><br>30#<br>8088   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102   | since 02/14, last log 10/21<br>since 11/16, last log 10/21<br>since 02/10, last log 10/21   |
| x   | x                                     |                                       |     |   | 0930<br>1000<br>1020  | E11<br>E11<br>S11A                               | 03  | 6480<br>48#<br>6940<br>27#<br><b>9951</b><br>30#<br>8088<br>42#<br>7317  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984  | since 02/14, last log 10/21<br>since 11/16, last log 10/21<br>since 02/10, last log 10/21<br>2nd transmission Thu 17302   |
| x   | x<br>x                                |                                       | ×   |   | 0930<br>1000<br>1020<br>1045  | E11<br>E11<br>S11A<br>E11                        | 03<br>03<br>03  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  |
| x   | x<br>x<br>x                           |                                       | x   |   | 0930<br>1000<br>1020<br>1045<br>1205  | E11 E11 S11A E11 E11                             | 03<br>03<br>03<br>03<br>03  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#  | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z   |
| x   | x<br>x<br>x                           | ×                                     | x   |   | 0930<br>1000<br>1020<br>1045<br>1205  | E11 E11 S11A E11 E11 E11                         | 03<br>03<br>03<br>03<br>03  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#  | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  |
| x   | x x x x x x x                         | x x                                   | x   | : x                                     | 0930<br>1000<br>1020<br>1045<br>1205<br>1230  | E11 E11 S11A E11 E11 E11 E11 E11                 | 03<br>03<br>03<br>03<br>03<br>03  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  |
| x   | x<br>x<br>x                           | x x                                   | x   |   | 0930<br>1000<br>1020<br>1045<br>1205<br>1230<br>1300<br>× 1330                            | E11 E11 S11A E11 E11 E11 E11 E11 E11             | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03                                    | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409  | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  since 10/15, last log 10/21  since 10/15, last log 10/21  since 06/14, last log 10/21   |
| x   | x x x x x x x                         | x x                                   | x   | х                                       | 0930 1000 1020 1045 1205 1230 1300 x 1330 1345  | E11 E11 S11A E11 E11 E11 E11 E11 E11 E11         | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03                              | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 17302  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 04502  since 10/11, last log 10/21  Nov-Feb & May-Aug at 16452  since 07/14, last log 10/21  since 05/15, last log 10/21  since 10/15, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 07452  since 03/14, last log 10/21   |
| x   | x x x x x x x                         | x x                                   | x   | x<br>x                                  | 0930<br>1000<br>1020<br>1045<br>1205<br>1230<br>1300<br>× 1330<br>1345<br>1530<br>× 1530  | E11          | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03                        | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  since 06/14, last log 10/21  since 03/14, last log 10/21  2nd transmission Mon 0745z  since 03/14, last log 10/21  2nd transmission Thu 1530z   |
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| x   | x                                     | x<br>x<br>x                           | x   | x :                                     | 0930 1000 1020 1045 1205 1230 1300 x 1330 1345 1530 x 1605 1645 x 1650                    | E11          | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>0 | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>4505<br>36#<br>4505<br>36#<br>4505<br>37#<br>4505<br>36#<br>4505<br>36#<br>4505<br>36#<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4505<br>4506<br>4505<br>4505<br>4506<br>4505<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>4506<br>450   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>4505<br>36#<br>4505<br>36#<br>5082<br>23#  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33# search<br>6849<br>92#<br>5082<br>97#<br>5082   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>4909<br>36#<br>4909<br>36#<br>5344<br>23#<br>33#<br>6849<br>92#<br>5082<br>97#<br>5779<br>41#   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 17302  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 04502  since 10/11, last log 10/21  Nov-Feb & May-Aug at 16452  since 07/14, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 07452  since 03/14, last log 10/21  2nd transmission Mon 07452  since 03/14, last log 10/21  2nd transmission Thu 15302  since 11/15, last log 10/21  since 10/11, last log 10/21  since 10/11, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21   |
| x   | x                                     | x x x                                 | x   | x :                                     | 0930 1000 1020 1045 1205 1230 1300 1345 1530 1645 1645 1650 1715                          | E11          | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>0 | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>7864<br>41#<br>13470<br>24#  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>7864<br>41#<br>133470<br>24#  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>22#<br>33# search<br>6849<br>92#<br>5779<br>41#<br>12924<br>24#   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33#<br>6849<br>92#<br>5082<br>97#<br>5779<br>41#<br>12924<br>24#   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 0745z  since 03/14, last log 10/21  2nd transmission Thu 1530z  since 11/15, last log 10/21  since 10/11, last log 10/21  since 10/11, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21  since 02/15, last log 10/21  until 09/21 at 1625z  since 03/10, last log 10/21   |
| x   | x                                     | x x x x x x x x x x x x x x x x x x x | x   | x :                                     | 0930 1000 1020 1045 1205 1230 1300 x 1330 1345 1530 x 1605 1645 x 1650 x 1715             | E11          | 03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>03<br>0 | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>6923<br>97#<br>7864<br>41#<br>13470   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>65#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33# search<br>6849<br>92#<br>5779<br>41#<br>12924  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33#<br>6849<br>92#<br>5082<br>97#<br>5779<br>41#<br>12924  | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  2nd transmission Mon 0450z  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 0745z  since 03/14, last log 10/21  2nd transmission Thu 1530z  since 11/15, last log 10/21  since 10/11, last log 10/21  since 05/16, last log 10/21  until 09/21 at 1625z  since 03/10, last log 10/21  2nd transmission Mon 0450z         |
| x   | x                                     | x x x x x x x x x x x x x x x x x x x | x   | x :                                     | 0930 1000 1020 1045 1205 1230 1300 1345 1530 1645 1645 1650 1715 1730 1745                | E11          | 03 03 03 03 03 03 03 03 03 03 03 03 03 0  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5737<br>5371<br>31#<br>5737<br>52#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>6923<br>97#<br>7864<br>41#<br>13470<br>24#<br>10213<br>28#<br>7317   | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>6923<br>97#<br>7864<br>41#<br>13470<br>24#<br>10213<br>28#<br>7317  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>65#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33# search<br>6849<br>92#<br>5779<br>41#<br>12924<br>24#<br>11486<br>28#<br>6849   | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33#<br>6849<br>92#<br>5082<br>97#<br>5779<br>411<br>12924<br>24#<br>11486<br>28#<br>6849   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 1730z  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 10/11, last log 10/21  Nov-Feb & May-Aug at 1645z  since 07/14, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 0745z  since 03/14, last log 10/21  2nd transmission Thu 1530z  since 11/15, last log 10/21  since 10/11, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21  since 02/15, last log 10/21  until 09/21 at 1625z  since 03/10, last log 10/21  2nd transmission Mon 0450z  since 04/18, last log 10/21        |
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| ×   | x                                     | x x x x x x x x x x x x x x x x x x x | x   | x : : : : : : : : : : : : : : : : : : : | 0930 1000 1020 1045 1205 1230 1300 1345 1530 1645 1645 1650 1715 1730 1745 1850           | E11          | 03 03 03 03 03 03 03 03 03 03 03 03 03 0  | 6480 48# 6940 27# 9951 30# 8088 42# 7317 69# 6923 46# 12530 33# 5371 31# 5737 52# 14972 91# 10330 26# 4505 36# 5082 23#  11116 92# 6923 97# 7864 41# 10213 28# 10213 28# 7317 64#  | 6480<br>48#<br>6940<br>27#<br>9951<br>30#<br>8088<br>42#<br>7317<br>69#<br>6923<br>46#<br>12530<br>33#<br>5371<br>31#<br>5737<br>52#<br>14972<br>91#<br>10330<br>26#<br>4505<br>36#<br>5082<br>23#<br>4505<br>36#<br>5082<br>23#<br>11116<br>92#<br>7864<br>41#<br>13470<br>24#<br>10213<br>28#<br>7317<br>644# | 6252<br>48#<br>7469<br>27#<br>8597<br>30#, check<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>22#<br>33# search<br>6849<br>92#<br>5779<br>41#<br>11486<br>28#<br>6849<br>64#  | 6252<br>48#<br>7469<br>27#<br>8597<br>30#<br>8102<br>42#<br>7984<br>69#<br>6433<br>46#<br>4909<br>31#<br>5082<br>52#<br>13363<br>91#<br>5409<br>26#<br>4909<br>36#<br>5344<br>23#<br>33#<br>6849<br>92#<br>5779<br>41#<br>12924<br>24#<br>11486<br>28#<br>6849<br>64#   | since 02/14, last log 10/21  since 11/16, last log 10/21  since 02/10, last log 10/21  2nd transmission Thu 17302  since 03/18, last log 10/21  since 03/10, last log 10/21  2nd transmission Mon 04502  since 10/11, last log 10/21  Nov-Feb & May-Aug at 16452  since 07/14, last log 10/21  since 05/15, last log 10/21  since 06/14, last log 10/21  2nd transmission Mon 07452  since 03/14, last log 10/21  2nd transmission Mon 07452  since 03/14, last log 10/21  2nd transmission Thu 15302  since 11/15, last log 10/21  since 10/11, last log 10/21  since 05/16, last log 10/21  since 05/16, last log 10/21  since 03/10, last log 10/21  since 03/10, last log 10/21  since 04/18, last log 10/21  since 04/18, last log 10/21  since 06/17, last log 10/21  since 05/16, last log 10/21 |

<u>XPA1 Sched c and XPA2[Sched m & p] Russian Intelligence and/or Diplomatic Multitone Systems</u> [Radiogramma] Transmission Schedules.

| H+40         12221       13521         13363       14563         13984       14984         11576       10776         12227       10827         11559       10794         15814       16314         16169       17469         13883       12183         12207       13507  | Zulu > | XPA1 Tuesday/Thurs      | Sched c |       | XPA2 Sch              | Sched m |       | XPA2 Sched | Sched p               |       |
|---|--------|-------------------------|---------|-------|-----------------------|---------|-------|------------|-----------------------|-------|
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At the closure of the November Issue we always remember those who fought and acted for the freedoms we enjoy today. This image repeated because my father had the misery to have fought in Burma. Never spoke of it. In later life before he passed at 94 he looked out of his window, turned to me and said, "I lost some good mates in Burma; 'look at what they've done with what we've given them."

'They' referred to the various governments since the end of WW2.

My Godfather died of wounds inflicted on him as a Japanese prisoner of war; used for bayonet practice he survived, only to die in 1950.

No wonder my father would not knowingly purchase anything Japanese.

[As I reflect on the above I do wonder what he'd think of my international family, extended by Indian and Filipino wives and now Japanese too]?

I have visited Kanchanaburi War Graves on three occasions. Each time was an emotional event; average age of those who died was 23 years. Some younger, some older at the hands of the Imperial Japanese Army.

## Image of Plaque erected at site of the 'Bridge over the River Kwae' where allied prisoners of war were used as slave labour by Imperial Japanese Forces



Plaque erected by the Kanchanaburi Municipality of Thailand in Remembrance of those souls who perished and whose remains are interred in the War Graves nearby

Suicide in the Trenches

I knew a simple soldier boy Who grinned at life in empty joy, Slept soundly through the lonesome dark, And whistled early with the lark.

In winter trenches, cowed and glum, With crumps and lice and lack of rum, He put a bullet through his brain. No one spoke of him again.

You smug-faced crowds with kindling eye Who cheer when soldier lads march by, Sneak home and pray you'll never know The hell where youth and laughter go.

Siegfried Sassoon

### SPECIAL MATTERS

Thanks to all our contributors:

Ary, BR, Brixmis, DanAr, Dannix, , E, Edd, HH, HJH, JkC, Jochen, MaleAnon, , PoSW, PLdn, RNGB Apologies to anyone missed.

E: Thanks for your reports as ever; Compliments to you and yours and dodge the C-19!

#### **RELEVANT WEBSITES**

ENIGMA 2000 Website:

Mystery Signals

Time zone information:

Encyclopedia of Espionage, Intelligence, and Security

http://www.enigma2000.org.uk

http://www.mysterysignals.signalshed.com/

http://www.timeanddate.com/library/abbreviations/timezones/

http://www.espionageinfo.com/

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